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September 2007

Fast Track to

The FREE OFFICE

OpenOffice.org
Writer
Calc
Impress
Draw
Base

The Mail Client
Thunderbird
Solutions From Google

Zoho
The Office Suite
Collaboration Tools
Personal Productivity
Business Productivity

YOUR HANDY GUIDE TO EVERYDAY TECHNOLOGY

Fast Track to The Free Office

By Team Digit

Credits

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Introduction

All Work And No Pay

Unless you're a pirate, setting up software for a small office involves money. Or so you thought. The good news is, you don't need to spend a penny. You do need to spend some time, though—the time needed to read this book! We're going to tell you about the free software available for your basic needs, and how to use them.

We wonder why more people don't use OpenOffice.org... it's free, and it's almost as feature-rich as Microsoft Office. Half this book is devoted to an introduction to the components of OOo: Writer (think MS Word), Impress (think PowerPoint), and the others. Assuming you haven't used that suite, we walk you through the basics. Luckily, there isn't too much to re-learn even if you and your employees are used to MS Office, as you'll find. The good folks beyond the development of OpenOffice have taken pains to ensure there isn't too much pain involved in the getting-unused-to. Keyboard shortcuts, for example, are the same in many cases.

Then there's the mail client that your office needs, of course, and we have a section devoted to that. Thunderbird is the answer, and it's not just company mail: we discuss how you can configure that software to be your client for your Gmail as well, and more.

Being able to collaborate on documents irrespective of location is a necessity now, and that paradigm can only gain in popularity. For that we have the Zoho suite. We've gone into considerable detail to explain how you can use Zoho as effectively as possible. Now, if you're worrying that using Zoho might take up some precious learning time, here's to put you at ease (with the example of Zoho Writer)—you can go to the URL and work using your browser; you can install an MS Office plugin that allows you to work on your documents from within Word; or you install a simple Widget so Zoho looks like it's on your Desktop. That indicates the kind of flexibility the creators of Zoho want to give you—for free!

We love feedback. Really. Do write in and tell us if this book helped.

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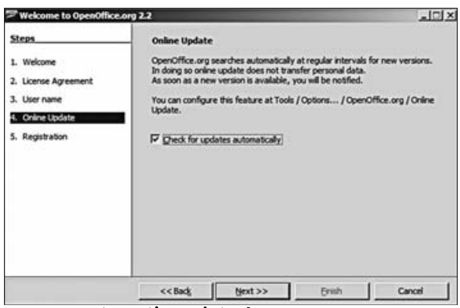
Openoffice.org

When it comes to free software for businesses, two things immediately come to mind: Linux and OpenOffice.org (OOo). In recent years, the popularity of OOo has grown by leaps and bounds, and as office suites go, it's second only to Microsoft Office. This section aims to demystify the various tools that make up OOo and have you using them with ease in no time.

1.1 A Beginner's Guide

Starting the installation

If you're looking for a free office suite with almost as many features as Microsoft Office, you're going to have to get OpenOffice.org. You can just install it from this month's accompanying DVD. The version included is 2.2.1, which is the latest as of August 2007. (If you're reading this at a much later date, you might want to download the latest version from **www.openofice.org**. The file is around 108 MB.) Choose an appropriate directory for the installation. You can choose to make OOo the default editor for Microsoft Office files (.doc, .xls, .ppt, and the others).



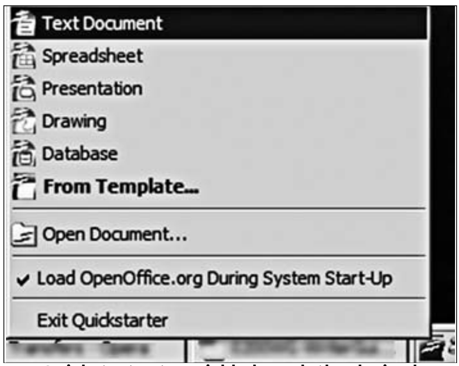
Turn on automatic updates!

The first time you run an OOo application, you will be asked to register your copy. You also might be asked to take a survey—completely optional, of course—to help the developers make OOo better in the future. We recommend taking this survey in order to improve your chances of getting the features you want in later editions of OOo. We also suggest turning on automatic updates at the time of installation.

Now you can start using OpenOffice.org. In `Start > Programs`, you will find the following programs under the

OpenOffice.org title: Base, Calc, Draw, Impress, Math, and Writer. Base is a database application that will help you create and manage databases—similar to Microsoft Access. Calc is a spreadsheet application similar to Microsoft Excel. Draw is a charting application that lets you make flowcharts, network diagrams and any other organisation charts. Impress is similar to Microsoft PowerPoint—it is a presentation creation tool. Math is a formula manipulation tool that can be used inside other OOo applications, or as a standalone tool as well. Finally, there's Writer, a word processing application that is OOo's answer to Microsoft Word.

OOo installs what it calls a Quickstarter to the Windows Taskbar. You can use this to quickly launch the respective program by choosing whether you want to make a new text document, spreadsheet, presentation, etc.



Use Quickstarter to quickly launch the desired application

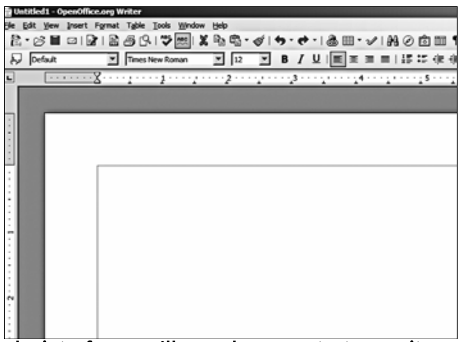
Since word processing is the most popular use for both office and home users, we'll kick-start this book by looking under Writer's hood.

1.2 Writer

Most of us need to do a little word processing from time to time. Whether it's writing a letter, a memo or even an entire book, we need word processing software to make it easier. Windows ships with Notepad and WordPad by default; these allow you to type out stuff, and behave like very elementary word processors, but are nothing like Microsoft Word or OpenOffice.org's Writer. A fully-packed word processor includes features such as auto-complete and auto-correct, formatting and styles, a dictionary and thesaurus, and many more features that make word processing on a PC a snap.

1.2.1 The Interface

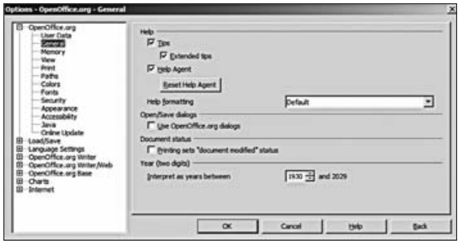
When you start Writer, you are greeted by a blank document called Untitled1—pretty standard for most software. The menu bar is at the top left, as with most software, and below that you will find the Standard Toolbar, which contains common functions that you'll use when doing your word processing. Directly below the Standard Toolbar is the Formatting Toolbar. This contains everything you need to format your document, such as setting text to bold, italics, underline, or adding highlighting, changing fonts, font sizes, etc.



The interface you'll see when you start up Writer

You can just hover over any button and a tool-tip will tell you that button's name. However, if you are a beginner at using such applications, you might need a little extra help. You can turn on extended tool tips to get more information. Just go to `Tools >`

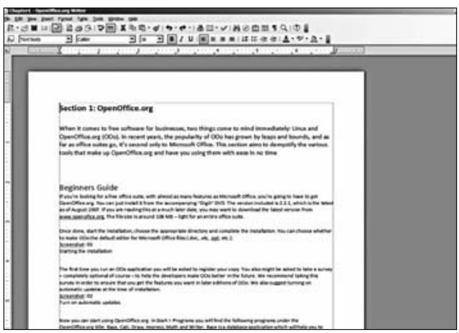
`Options` from the Menu Bar and you will see a dialog box. On the left you will see a navigation structure, and under the OpenOffice.org header you will see the General option. Click on it and on the right you will see a few checkboxes. By default, the Extended Tips box is unchecked, and you can check it to turn the extended tool-tips on. Click OK when you're done.



Turning on Extended Tips

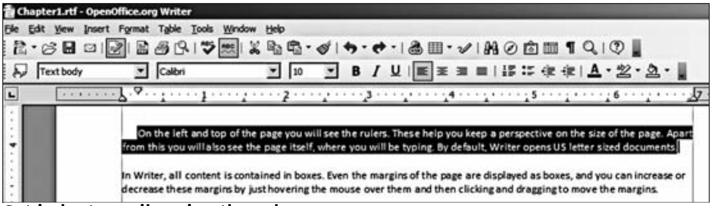
At the left and top of the page you will see the rulers. These help you keep a perspective on the size of the page. Apart from this you will also see the page itself, where you will be typing. By default, Writer opens US letter-sized documents.

In Writer, all content is contained in boxes. Even the margins of the page are displayed as boxes, and you can increase or decrease these margins by just hovering the mouse over them and then clicking and dragging to move the margins.



Change the margins of a page by dragging them

You can change the indents of a paragraph just as easily by just selecting it and dragging the marker on the ruler to the position you want the paragraph to start from. This way you can individually control how each paragraph is displayed. For more options, just double-click the ruler to get to the Paragraph settings dialog box.



Set indents easily using the ruler

You can also change the way you view your page by going to View on the Menu Bar and selecting between the Print and Web layouts. The difference is that in Web layout, you use the entire screen area and do not view your document as a page. This is good when typing out lots of text. The print layout is good for when you want to print the document you are creating, and want to see how it will look in your printout.

1.2.2 Formatting

Word processing is all about formatting. It's what sets OOo Writer and Microsoft's Word apart from Notepad or any other text editor. As with any good word processing tool, Writer has all the basic formatting tools accessible right from the Formatting toolbar.

Examples of different formatting styles that you can quickly set

When typing out your text, you can use the formatting toolbar to quickly select text styles, such as headings, lists, body paragraphs hanging indents, etc. By default, only a few common styles are visible from this drop-down, but you can see a complete list by clicking on the dropdown and selecting 'More...'; you can also just click on the first button from the left

on the Formatting toolbar. This opens the Styles and Formatting toolbox, which you can use to quickly set dozens of different styles. In order to apply a style to text, just highlight the desired text and then double-click the style.

The formatting toolbar, from left to right, has options to quickly change the font type, font size, set bold, italics and underline, paragraph alignment (left, center, right, justified), add numbering, bullets, decrease and increase indents, change the text colour, background colour, and add a fill to the page or paragraph. For even more control over the formatting, you can open up the Format menu from the Menu bar and change character, paragraph and page formatting.

We've decided that office suites are software that you should just use, rather than read a lot of theory about. So instead of trying to explain the function of each menu item and expect you to figure out how and when to use them, we've decided to present you with a lot of little tutorials that will not only tell you how to use the functions of Writer, but also show you when and why they are used. Needless to say, the largest section of this chapter follows.

1.3 Tutorials

1.3.1 Opening And Saving

In order to open a new text document, go to `File > New > Text Document`, or just press `[Ctrl] + [N]`. Although this may sound like a pointless tip, the reason we mention it is because with OOo, you can create a new file in any form—database, text, spreadsheet, presentation, etc.—from any of the office tools. So if you choose to open, say, a new spreadsheet from within Writer, it opens Calc automatically.

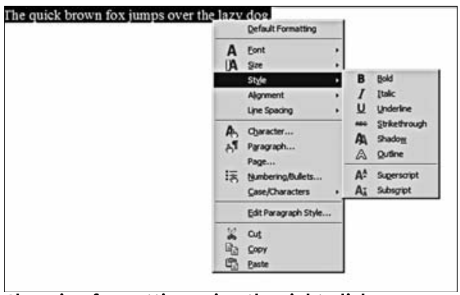
The first time you want to save the document, just press `[Ctrl] + [S]` as usual, but then you have to choose the format in which to save. By default, Writer will save documents in the .odt

(OpenDocument Text) format. If it's a personal document that only you will be using, this is fine, but if you want to share the document with others who might be using other office suites, it might be better to save it as an RTF or DOC file.


Saving a document in different formats

1.3.2 Right-click

Any time you want to change the formatting of selected text, just select the word, sentence or paragraph and then right-click to see the options you have. You can change font type, font size, styles, paragraph styles, casing, and just about any other formatting change right here.



Changing formatting using the right-click

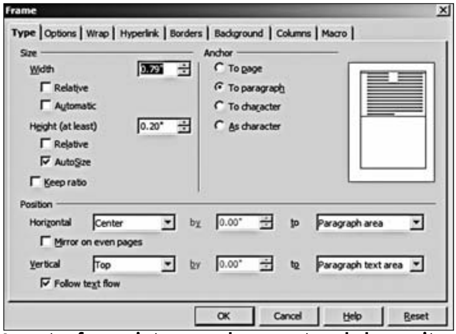
1.3.3 Insert

Very often you will find the need to insert graphics, tables, or other elements into your documents. This is easily taken care of in Writer. On the Menu Toolbar, you will find the Insert option, which will allow you to insert anything you need into your document.

To insert a graphic or image into your document, go to `Insert > Picture > From File...`, and select the picture you want.

To insert a table, go to `Insert > Table`, select the number of rows and columns you want and click OK.

Writer also has frames that you can insert into documents. Frames are like boxes or partitions in your documents, and you can insert one by going to `Insert > Frame`.



Insert a frame into your document and choose its properties

You can also insert special characters into your text by going to `Insert > Special Character...` This is similar to the Windows Charmap, and you can insert any special characters you desire.

You can also use the Insert menu to insert fields (Date, Time, etc.), hyperlinks, indexes and objects such as charts, formulas, etc.

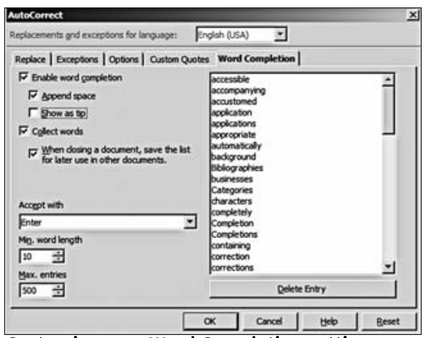
1.3.4 Word Completion

One very useful (or very irritating!) feature of Writer is Word Completion. While typing, if Writer can guess what word you're trying to type, it auto-completes it for you. If you're a touch typist and only look at the screen, this could be either a good or bad thing. When Writer guesses right, all you have to do is press [Enter] and the suggested word is accepted and typed for you. However, when Writer gets it wrong, this can break your thought process and cause you to make mistakes—or slow down your typing. This is the case for new users only, of course; once you get used to it, Word Completion can actually be quite useful. Let's look at an example:

When trying to type out the word "press" or "precise", or any word beginning with the letters "pre", Writer automatically suggests "presentation". Now if you're actually trying to type "presentation" this is a good thing, because all you have to do is type "pre" and press `[Enter]`, saving eight keystrokes. However, when touch

typing, this can be confusing in the beginning when you're *not* trying to type "presentation". Once you get used to this feature, you will automatically ignore the suggestions. You will also start remembering longer words by how they are suggested, which is faster, but really messes you up when using other office software.

To turn Word Completion on or off, just go to `Tools > Autocorrect`, click on the Word Completion tab and then check or uncheck the "Enable word completion" box to turn it on or off respectively. If you decide to use Word Completion, you might want to customise it by checking the Append Space box. This will automatically add a space after you accept a word that Writer suggests. You can also remove words from the list of words Writer has already collected, change how long or short the word should be that Writer suggests, decide whether Writer should learn new words when you use them, and more.



Customise your Word Completion settings

In addition, you can also change the key that is used to accept the suggested word, and most importantly, how the suggested word is displayed—by default, Writer suggests the Word Completion in-line with a dark blue highlight. This can cause a little confusion for touch typists, and so the facility of suggesting the word as a tool tip instead is provided. Try both ways to see which you prefer.

1.3.5 AutoText

If you're the extremely lazy type, you can assign the ultimate in shortcuts. For absolutely anything. That's the magic of AutoText—it gives you the ability to assign a key combination to reproduce tables, text, graphics, or anything else. So if you're

used to typing the name of your company very often—Jasubhai Digital Media, in our case—you can just assign a shortcut so that you can just type JDM and press `[F3]` to insert the text "Jasubhai Digital Media" automatically.

To set your own AutoText, just type in the text, highlight it, and then press `[Ctrl] + [F3]` (or select Edit > AutoText). Type in the text—Jasubhai Digital Media in our case; the shortcut is auto-selected, and you can change it if you want. Now click the AutoText button on the right, select New (text only) and then click Close. From now on, if you type the shortcut and press `[F3]`, the text will be replaced with the AutoText you want.

1.3.6 Spell Checking

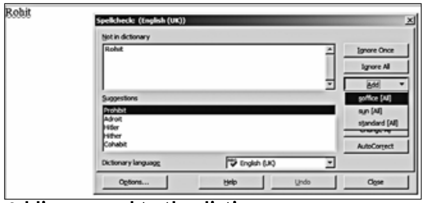
Let's admit it—most of us are bad at spelling. We often make common mistakes and typos plague our existence. When it comes to official business, nothing is more embarrassing than a letter littered with errors. One of the biggest reasons behind word processing software's popularity is the fact that they make up for chinks in our language armour.

Writer, as any other word processing software worth it's salt, comes with the spell check feature. When you type and make a spelling mistake, the errant word is highlighted with a squiggly (curvy) red line underneath it. When you correct the error this line will disappear. Sometimes, however, you might want to disable this feature—for example, when writing out a document with a lot of names in it, especially our Indian names, which word processing software just refuse to recognise.

On the standard toolbar you will see the spell check button: "ABC" with a red curvy line under it. You can use this button to enable or disable automatic spell-checks, according to your needs. You can always use the button on its left—"ABC" with a blue tick mark under it—to manually check spellings in your document.

When manually spell-checking your document, if Writer accidentally finds names of peoples or places to be wrong, you can just

click on the Add button to add the word to Writer's dictionary, and thus prevent the same word from being highlighted as an error again. When you click Add, you can choose between adding the word to all of Sun's products, all of OOo's programs, or just the standard dictionary.



Adding a word to the dictionary

1.3.7 Customising Layouts

Once you start using Writer, you will want to be able to customise the way your documents are displayed on-screen, and which toolbars are visible and which aren't. Since everyone is unique, as are one's likes and dislikes, there's no right or wrong method of customising your Writer look and feel, so use the tips we give you here to experiment and find your own comfort zone.

1.3.7.1 Views

To begin with, you have to choose the view you feel most comfortable with. We've already told you about selecting between Print and Web views from the View drop down on the Menu Toolbar. However, apart from this simple distinction, you can also change zooms and modify the way either the print or Web view look on your screen. You can also select the Full Screen view by pressing `[Ctrl] + [Shift] + [J]`, which will get rid of all toolbars and even the Windows taskbar, and leave you with only rulers and typing area. You can even hide the rulers by selecting `View > Ruler` (and un-checking Ruler) to leave you with a full-screen view of your document. This works wonders if you do not want to be distracted and just want to type, type, type!

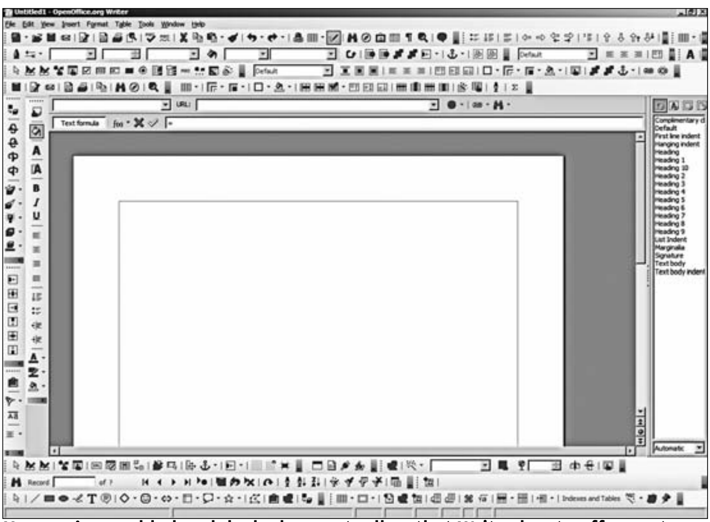
If you want to stick to a more traditional view, you can change the zoom level of your document by selecting `View > Zoom`. In Web view, this will just give you zoom values, but in the Print view, you can choose between regular zoom values and "Entire

page", "Page width" and "Optimal". Instead of going through the menu, however, you can quickly set your optimal zoom level by using [Ctrl] + mouse scroll up/down. This means you keep [Ctrl] pressed and use your mouse wheel to scroll up or down—scroll up to zoom in and scroll down to zoom out.

1.3.7.2 Docking

Some of you might like to have as many options at your fingertips as possible. This means having some of the additional toolbars, such as the Styles and Formatting toolbar open. However, sometimes these new toolbars open as floating windows that may get in the way of viewing your document. Instead of always dragging them around the screen to see what's behind them, you can just dock these toolbars to get them out of the way. Each toolbar has a preset place for docking—sometimes on the left, an other times on the Standard or Formatting toolbar.

Let's say you want to dock the Styles and Formatting toolbar. You do so by opening it first ([F11]), then holding down [Ctrl]



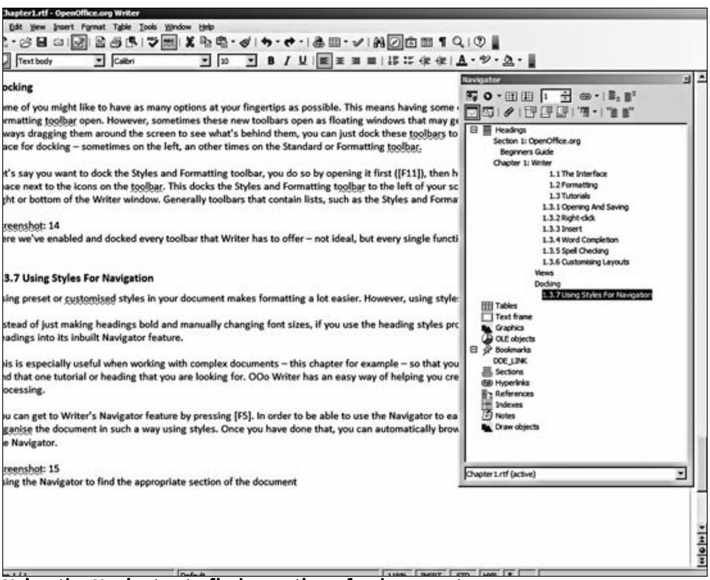
Here we've enabled and docked every toolbar that Writer has to offer—not ideal, but every single function of Writer is visible right here

and double-clicking on a blank space next to the icons on the toolbar. This docks the Styles and Formatting toolbar to the left of your screen. Most toolbars can be docked to the top, left, right or bottom of the Writer window. Generally toolbars that contain lists, such as the Styles and Formatting toolbar, can only be docked to the left or right.

1.3.8 Using Styles For Navigation

Using preset or customised styles in your document makes formatting a lot easier. However, using styles also helps you organise your document better.

Instead of just making headings bold and manually changing font sizes, if you use the heading styles provided to you, Writer will automatically add the headings into its inbuilt Navigator feature. This is especially useful when working with complex documents, so that you don't have to browse through dozens of pages to find that one tutorial or heading that you are looking for. OOo



Using the Navigator to find a section of a document

Writer has an easy way of helping you create order out of the madness that is word processing.

You can get to Writer's Navigator feature by pressing `[F5]`. In order to be able to use the Navigator to easily find content in your document, you first need to organise the document in such a way using styles. Once you've done that, you can automatically browse through the headings in your document using the Navigator.

The Navigator also helps you quickly find tables, frames, graphics, hyperlinks, indexes and more within your document.

Another useful feature is the ability to move chapters around in the document by just moving them around in the Navigator. So instead of copying and pasting large amounts of text and scrolling up and down, you can organise your document right from within the Navigator window. To prevent accidental moving of chapters, you cannot just drag and drop them into position, so you will have to select a heading and then move it using the Promote Chapter or Demote Chapter buttons of the Navigator. If you want to change the levels of a heading (make a sub-heading a heading), you can use the Promote Level and Demote Level buttons.

1.4 Setting Options

Once you've gotten used to Writer, it's time to set a few options, now that you can understand what they mean. If you are used to office suites, you may want to do this immediately after installing OOo. Remember that these are general OOo options, so the same apply to all tools in the OOo suite.

Under `Tools > Options`, you should see the Options—OpenOffice.org dialog box. On the left you will find a navigation structure with customisable options on the right. Below we'll explain some of the important options you may want to change:

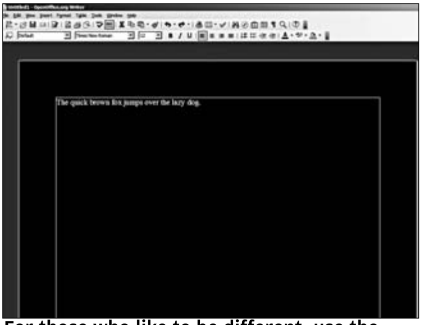
1.4.1 OpenOffice.org > General

Under General, you will see the following settings that you can change:

- Tips: Enable/disable tool tips
- Extended tips: More or less details in tool tips
- Help Agent: Enable/disable help and suggestions from OOo's inbuilt assistant
- Help Formatting: Select between high and low contrast for the help section
- Use OpenOffice.org dialogs: Choose between operating system dialog boxes and OOo's own dialog boxes
- Printing sets "document modified" status: Choose whether printing a document counts as a document change—whether modified print settings are saved
- Year (two digits): Choose a century between which two-digit year inputs are interpreted. Does 07 mean 1907 or 2007?

1.4.2 Other Important Settings

- `Memory > Undo`: Choose how many levels of undo are saved by OOo
- `Memory > Graphics cache`: Select how much memory OOo uses for itself and the graphics it embeds. (This is best left at the default values unless you face slowing down or crashes)
- `Memory > Cache for inserted objects`: How many inserted objects are stored in memory
- `Memory > OpenOffice.org Quickstarter`: Select whether to enable or disable the Quickstarter in the taskbar at startup.
- `View > 3D View`: Choose whether software rendering or OpenGL is used to render 3D objects in OOo.
- `Paths > Paths used by OpenOffice.org`: Change the default paths that OOo uses to read and write data for:



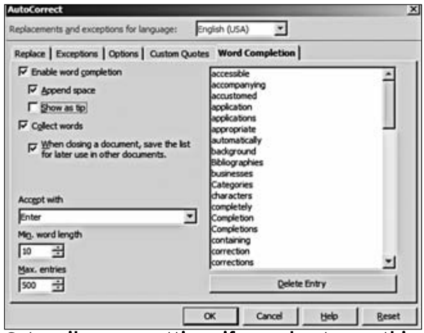
For those who like to be different, use the Options to change the default colours of the interface

AutoCorrect, AutoText, Backups, Gallery, Graphics, My Documents, Templates and Temporary files.

- `Colors`: Modify the colour palette.
- `Appearance > Color scheme`: Change the way OOo looks, including default font colour, default background colour, etc.

1.4.3 Settings For Writer

Go to `Tools > Options > OpenOffice.org Writer`. Here you will find settings you can modify that affect only OOo Writer.

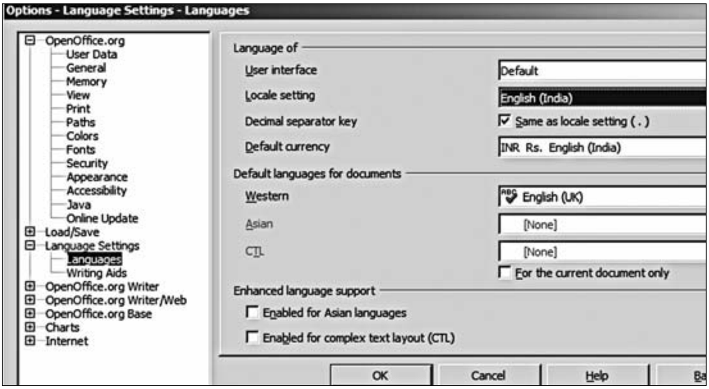


Set mail merge settings if you plan to use this feature

- `General > Settings`: Change measurement units
- `Formatting aids > Display of`: Choose whether to display paragraph ends, custom hyphens, spaces, tabs, breaks, etc.
- `Grid > Grid`: Choose whether objects in Writer snap to grid lines or not, whether the grid is visible, etc.
- `Basic Fonts (Western)`: Choose the default fonts for headings and other basic styles
- `Print > Contents / Pages / Notes`: Select what content prints and what doesn't. The same applies for pages and notes
- `Changes > Text Display`: Choose how text is formatted when the track changes option is turned on
- `Mail Merge E-mail`: Put in e-mail account and SMTP settings in here if you're going to be using the mail merge feature to send mass mailers to your clients.

1.4.4 Language Settings

Not all of us use the same language settings—some of us prefer English (UK), some English (US), and so on. If you want to change your language settings, head over to `Tools > Options > Language Settings`.



Changing language settings

- User Interface: You can't really change this from English (USA), which kind of makes it a pointless setting
- Locale Setting: Change this to the country you live in—in our case, English (India)
- Default Currency: Obviously, we Indians will want to set this to INR Rs. English (India). You can set it to other languages though—Hindi, Marathi, Punjabi, Gujarati, Oriya, Tamil, Telugu, Kannada, and Malayalam
- Default languages for documents: We set this to English (UK), but you can set it to English (India), or any other language available in the drop-down
- For the current document only: If you want the language settings to only apply to the current document, check this box
- `Language Settings > Writing Aids > Options`: Here you can change whether or not the AutoCorrect feature looks at uppercase words, whether OOo should check spellings as you type, and various other options

1.5 Find And Replace

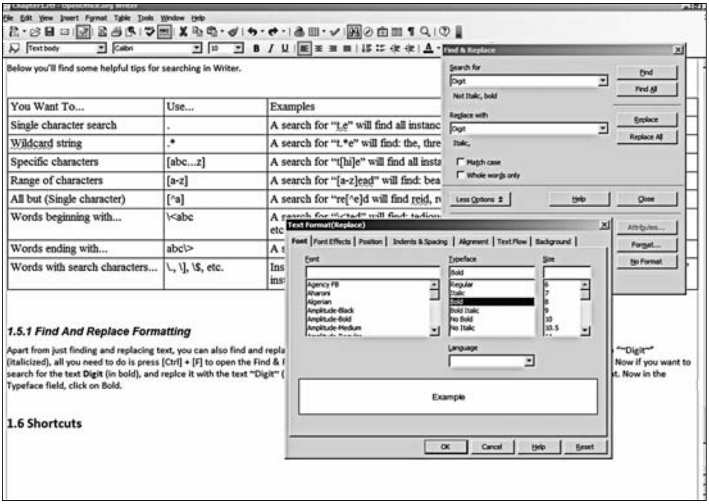
OpenOffice.org has really good find and replace functionality. Perhaps the best part of this function is the ability to search for wildcards, which is not available in most text editors. Below you'll find some helpful tips for searching in Writer.

You Want To Find...	Use...	Examples
Single Characters	.	A search for "t.e" will find all instances of the, tie, toe, tee, etc.
Wildcard Strings	.*	A search for "t.*e" will find: the, three, there, those, etc.
Specific characters	[a, b, c, ...z]	A search for "t[hi]e" will find all instances of "the" and "tie"
A range of characters	[A-Z]	A search for "[A-Z]ead" will find: bead, dead, head, lead, and read
All But (Single Character)	[^a]	A search for "re[^e]d will find reid, read, but will ignore reed.
Words Beginning With...	\<ABC	A search for "\<ted" will find: tedious, teddy, etc., but will ignore: exalted, halted, malted, etc.
Words Ending With...	ABC\>	A search for "ted\> will find: exalted, halted, wanted, etc., but ignore tedious, teddy, etc.
Words With Special Characters	\., \], \$, etc.	Instead of searching for "OpenOffice.org" USE "OpenOffice\.org", OR search for "\[Ctrl\]" INSTEAD OF "[Ctrl]"

1.5.1 Find And Replace Formatting

Apart from just finding and replacing text, you can also find and replace text with formatting. So if you want to, say, change all occurrences of "Digit" to "*Digit*" (italicised), all you need to do is press `[Ctrl] + [F]` to open the Find & Replace dialog box. Click on More Options, so that you can see the Format button. Now if you want to search for the text **Digit** in bold, and replace it with the text *Digit* (italicised), you need to click in the "Search for" field, type "Digit", then click on Format. Now in the Typeface field, click on Bold and click OK. Next, click in the "Replace with" field and then click on Format again. In the Typeface field, click on Italic and click OK.

Click Replace All to change all instances of **Digit** (Bold) with *Digit* (Italicised).



Finding and replacing text with formatting

1.6 Notes And Tracking

When more than one person is working on the same file, it is common to want to safeguard the data by tracking changes. Not only does this let you revert to the original without a problem, it also shows you exactly what was changed. This is especially useful when you have writers and editors both working on the same file, making or suggesting changes.

Before you share a file, you need to prepare it to track changes. To turn on the recording of changes, go to `Edit > Changes > Record`. To force this setting to stay active, go to `Edit > Changes > Protect Records`; when asked for a password, enter one and click OK.

When you get the document back, to view the changes just go to `Edit > Changes > Show`. If you want to add a comment with a change that you or another user has made, click to set the cursor where the change was made and go to `Edit > Changes > Comment`.

To accept or reject changes made to the document, just go to `Edit > Changes > Accept` or `Reject`. In the dialog box that pops up, select a change and then click Accept or Reject. You can also accept or reject all the changes made to the document by clicking Accept All or Reject All. You can also use the Filter tab to filter the displayed changes by date, author and action. So you can see all changes made in the last week, or all those made by Mr X, or just look for all deletions.

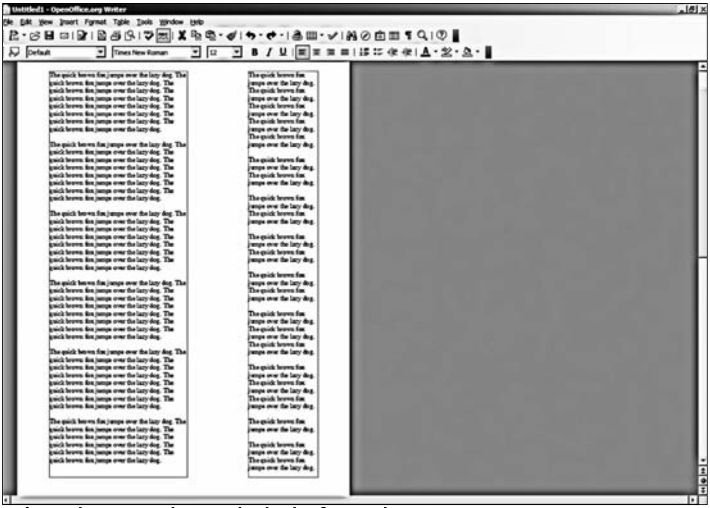
You can choose to Merge and Compare two different versions of the document. To merge, go to `Edit > Changes > Merge Document`, and select the other version of the document. To compare two versions of the same document, go to `Edit > Compare Document`, and select the other version at the dialog that pops up and then click OK.

Another way of collaborating with people is to leave notes or comments in the text. Just select the place you want to add the note, go to `Insert > Note`, type in the note, and click OK.

1.7 Layouts

Once you're a little more experienced with Writer, you will want to start planning your layouts before you begin your document—based on the type of content you plan to put into it. For example, if you're making a newsletter, you need a large heading, with up to three columns on the page, with a slightly cramped and busy look. If you will be including pictures, and want to run text around them, you might want to use a two column layout with preset places for graphics. And so on.

The most basic way to change the look of a page is to change the number of columns. To do this, select `Format > Columns`, choose the number of columns for the page, and click OK. You can also specify the width of the columns and the gutter width between each one, in case you want to have differing column widths.



Using columns to change the look of your document

You can also insert frames to your layout to add elements or little boxes of content. Just go to `Insert > Frame`, set the desired properties of the frame and click OK. In case you want to insert a picture, all you have to do is go to `Insert > Picture > From File...`, and choose the picture to insert—no need to add a frame first.

Another interesting way of using frames is to anchor them to a point. You can anchor frames to almost anything—a paragraph, a page, or even a single character. You can also link frames to each other so that text flows from one frame into the other. Just click on the first frame, click on the Link icon on the Object bar and then click on an empty frame to flow the text from one frame to the other.

1.8 Sections, Headers And Footers

You can create sections in your document, and even protect and hide them. Sections are like a document within a document. Select

Insert > Section to add a section. Now you will see the Insert Section dialog box, where you can name the section, set a password for the section and choose whether to hide it or not. You can also link a section to another document, or another section in another document, so that when that document is updated, so is the section in the current document. You can also choose layout options from the Columns tab, and add background colours, add indents for the section, and even add footnotes. There is a lot more you can do with sections, but it is based solely on how you want to use them. We suggest you use the good old trial and error method to come up with interesting ways to use sections in your document.

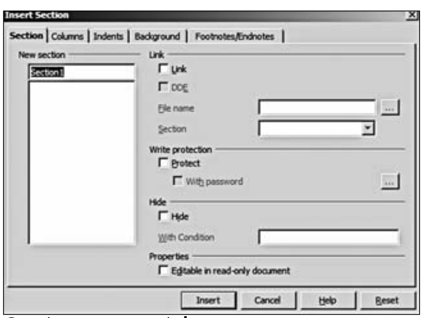
1.8.1 Headers / Footers

These are elements of your documents that always appear on every page at the top or bottom respectively. If you have content that needs to be added at the top or bottom of every page, you need to use this function to reduce repetitive work. Things like addresses, dates, page numbers, etc., can all be added to a header or footer.

You can insert headers from the Insert menu—`Insert > Header`, or `Insert > Footer`. After inserting a header or footer, you might want to add some preset constants, such as date, time, page numbers, author, etc. To do this, click the cursor inside the header or footer and go to `Insert > Fields`, and click on the element you want to add.

1.9 Creating Styles

Instead of depending solely on what OOo has to offer, you can start creating your own styles once you're accustomed to using the suite. In order to create your own



Create your own style

style, press [F11] to open the Styles and Formatting toolbar. Click on the Paragraph Styles icon (look for it using the tool-tips), and select the Default style. Now to create your own style, right-click on the default style and select New. You'll see the Paragraph Style box pop up. Here you can name your style and change all the desired settings for your new style—including the font, size, indents, alignment, etc.

1.10 Templates

One of the most efficient ways of working in a business environment is to use word processing software to make templates to make your life—and that of others—easier. For example, the simplest form of a template is a letterhead—where almost every printed document that is to be sent out to clients contains your company logo, address, and if it's a personalised template, it can even have your sign-off.

All word processing documents work on templates—even the blank document you open when you press [Ctrl] + [N] is based on the default blank template. OOo is no different from any other word processing software, and you can create your own templates—even replace the default template so that a new document is always opened with your template.

In order to open a new file based on a template, go to `File > New > Templates and Documents`. Select Templates from the left, and choose one of the existing templates.

To create your own template, you can first format a document the way you want to, then just save it as a template. After you're done with your file—adding headers, footers, and whatever formatting you need—just go to `File > Templates > Save`, type in the name of the template in the New Template field, assign a category and click OK.

Another way to create a template is to use a Wizard. You can use the Wizard to make templates for agendas, faxes or letters: just

go to `File > Wizards` and select the appropriate template type. Follow the on-screen instructions and add whatever you need to for the template, and then save the template as you did above.

You can get more templates from OOo's Extension Manager. Go to `Tools > Extension Manager` to start it and then choose to download new templates.

Instead of overwriting the default blank template, you can set any template to be the default template for new documents. Just go to `File > Templates > Organize`, select the template you want, right-click it and select Set As Default Template.

1.11 TOC And Indexes

When working on a rather large documents, it makes sense to have a table of contents (TOC) or an index of chapters, or headings.

Select `Insert > Indexes and Tables > Indexes and Tables`, and insert an index. Usually the default setting works, provided you have used styles to format your document.

Tip: Unbreakable

While typing, you may want to make sure that two words are not separated from each other. Take for example the words "Web site". If you want Web and site to not be broken across a paragraph, you can add a [Ctrl] + [Space] between the words. This is known as a non-breaking space.

Similarly, if you want to make sure that a hyphenated word is not broken across a paragraph, you can type [Ctrl] + [Shift] + [-], instead of a simple [-]. This is a non-breaking hyphen.

An example of the index of this document is:

Table of Contents—Chapter 1

If you want the index to be sorted alphabetically instead of the normal way, go to `Insert > Indexes and Tables`, and in the “Type” field, change the value of the drop-down to Alphabetical Index.

Tip: Shortcuts

Shortcut	What It Does
[Ctrl] + [A]	Selects everything
[Ctrl] + [J]	Justify
[Ctrl] + [D]	Double underline
[Ctrl] + [E]	Centred
[Ctrl] + [F]	Find and Replace
[Ctrl] + [Shift] + [P]	Superscript
[Ctrl] + [L]	Align Left
[Ctrl] + [R]	Align Right
[Ctrl] + [Shift] + [B]	Subscript
[Ctrl] + [Y]	Redo last action
[Ctrl] + [0] (zero)	Apply Default paragraph style
[Ctrl] + [1]	Apply Heading 1 paragraph style
[Ctrl] + [2]	Apply Heading 2 paragraph style
[Ctrl] + [3]	Apply Heading 3 paragraph style
[Ctrl] + [+] (Plus)	Calculates the selected text and copies the result to the clipboard
[Ctrl] + [-] (Hyphen)	Custom hyphens
[Ctrl] + [Shift] + [-]	Non-breaking dash
[Ctrl] + [*] (Numberpad)	Run macro field.
[Ctrl] + [Space]	Non-breaking spaces. Non-breaking spaces are not used for hyphenation and are not expanded if the text is justified
[Shift] + [Enter]	Line break without paragraph change
[Ctrl] + [Enter]	Manual page break
[Ctrl] + [Shift] + [Enter]	Column break in multi-columnar texts
[Alt] + [Enter]	Inserting a new paragraph without numbering
[Alt] + [Enter]	Inserting a new paragraph directly before or after a section or a table
[Home]	Go to beginning of line
[Shift] + [Home]	Go and select to the beginning of a line
[End]	Go to end of line
[Shift] + [End]	Go and select to end of line
[Ctrl] + [Home]	Go to start of document
[Ctrl] + [Shift] + [Home]	Go and select text to start of document

Tip: Shortcuts

[Ctrl] + [End]	Go to end of document
[Ctrl] + [Shift] + [End]	Go and select text to end of document
[Ctrl] + [PageUp]	Switch cursor between text and header
[Ctrl] + [PageDown]	Switch cursor between text and footer
[Insert]	Insert mode on/off
[PageUp]	Screen page up
[Shift] + [PageUp]	Move up screen page with selection
[PageDown]	Move down screen page
[Shift] + [PageDown]	Move down screen page with selection
[Ctrl] + [Del]	Delete text to end of word
[Ctrl] + [Backspace]	Delete text to beginning of word
[Ctrl] + [Shift] + [Del]	Delete text to end of sentence
[Ctrl] + [Shift] + [Backspace]	Delete text to beginning of sentence
[Ctrl] + [Tab]	Next suggestion with Automatic Word Completion
[Ctrl] + [Shift] + [Tab]	Use previous suggestion with Automatic Word Completion
[Alt] + [W]	Call back the original unknown word into the text box
[Ctrl] + double-click or and	Dock or un-dock the Navigator, Styles
[Ctrl] + [Shift] + [F10]	Formatting window, or other windows
[Ctrl] + [Alt] + [Up Arrow] or [Ctrl] + [Up Arrow]	Moves the active paragraph or selected paragraphs up one paragraph
[Ctrl] + [Alt] + [Down Arrow] or [Ctrl] + [Down Arrow]	Moves the active paragraph or selected paragraphs down one paragraph

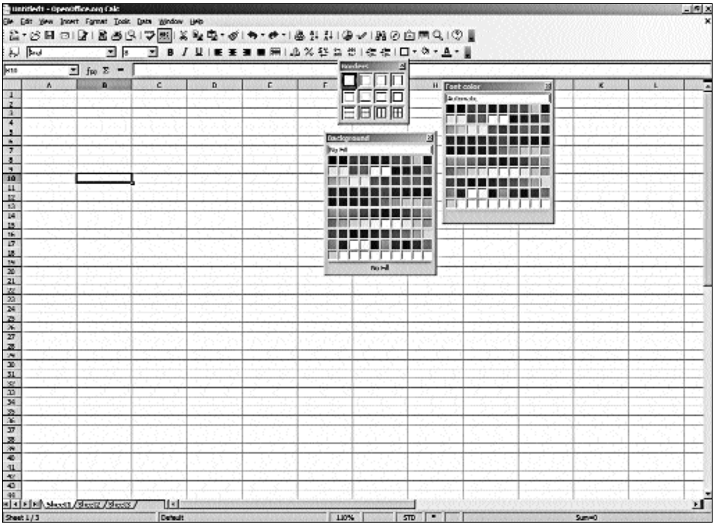
Tip: Select Anything

Let's say you want to change the font of all the headings or all the captions in your document, but they're not all placed consecutively in the document, what do you do? You could select them one-by-one, make the changes individually... or you could just select them all at once. Select the first bit of text, then scroll up/down to the next part you want to select, keep [Ctrl] pressed, and then select again. Repeat as many times as needed. Once done, apply whatever formatting changes you need to.

Calc

A lot of people will testify to having bought Microsoft Office just for Excel—that's the power of a spreadsheet application. Calc, OpenOffice.org's spreadsheet application, is perhaps a major reason for the rise in OOo's popularity. This chapter will get you started with Calc, helping you harness the power of this completely free, yet powerful spreadsheet application.

2.1 Introducing Calc

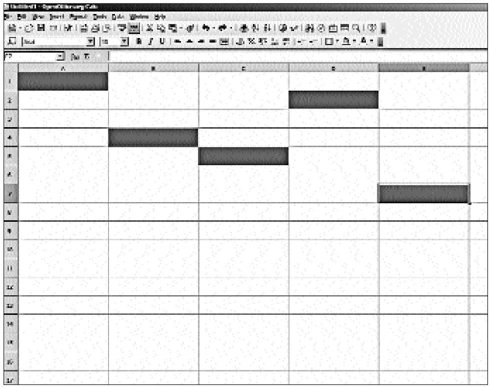


Calc's interface

Everyone from the accountants in your office to team leaders uses, or should use, spreadsheets. Even at home, you can use a spreadsheet application to manage your finances, make your shopping lists, etc. We'll focus on using OOo's Calc in the office. We're going to keep this first part simple, for those who have never used a spreadsheet before—if you have, skip to §2.2.

When you start up Calc, you will see a blank spreadsheet. If you've read through the previous chapter about OOo Writer, you will not have any trouble identifying the toolbars. As with Writer, Calc has the default Menu Bar, Formatting Toolbar, and Standard Toolbar.

A spreadsheet is divided into rows and columns—rows run horizontally from left to right and columns run vertically from top to bottom. Each row and each column intersect at one point, which is called a cell. You will see many little rectangular boxes


Here, we've highlighted the cells A1, B4, C5, D2 and E7

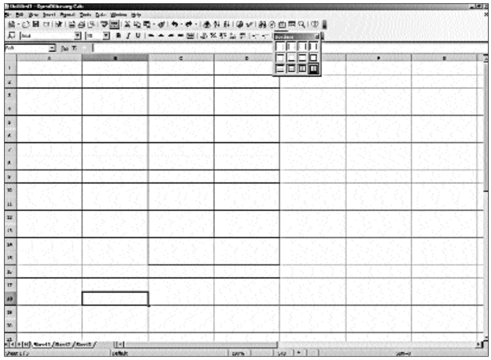
when you start up Calc; each of these boxes is a cell. What's important is to understand how to identify a cell. If you look at the labels for each row and column, you will see that columns are labelled on the top, starting with A, B, C, etc., and continuing to AA, AB, AC, etc., until IT, IU, IV. It's very rare you'll need to use more columns than that. Rows, on the other hand, are numbered from 1 to 65,536. The reason it's important for you to notice these numbers is because you will need them to identify cells. Take a look at the screenshot alongside to understand how to identify cells.

In the image, we've filled the cells A1, B4, C5, D2 and E7 with a background. The cursor is on E7—which means the cell that is seven rows down in the column E. Later in the chapter, when we start you off on formulas, you will need to be able to identify cells easily.

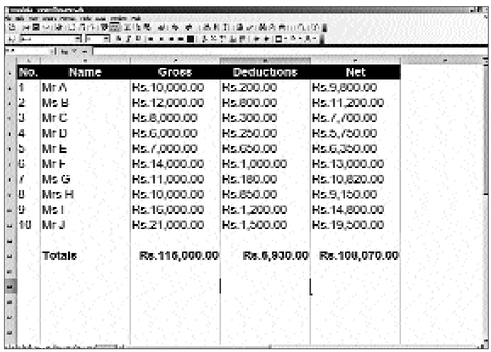
Most of the formatting options in Calc are very similar to what you would encounter in Writer—so if you are a beginner, and haven't read Chapter 1, do so now. The only differences in formatting options are cell-specific. Unlike in word processing, each cell is a unique entity in a spreadsheet, and each can have different formatting.

An example is the border style that you can set for cells. As shown in the screenshot, you can format a range of cells or even individual cells to have different types of borders.

A really simple example of how you can use a spreadsheet is to note down salaries and deductions of a small company. As shown in the screenshot, you can use the spreadsheet to calculate the total outgoing salaries, and automatically subtract deductions from the gross salary to calculate the net salary. Of course, this is a simple and straightforward calculation—real-world salary calculations are a lot more complex. Later in the chapter we'll look at using formulas, and then we'll explain how to find the right formula for your purposes.



You can set different borders for each cell or for a group of cells



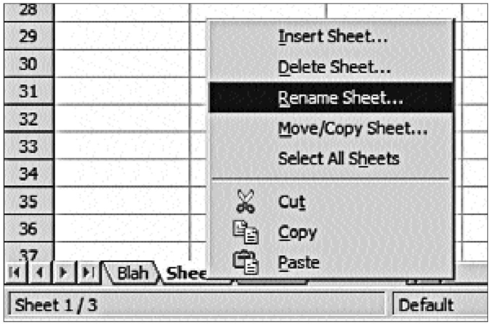
A rather simplistic salary calculation

2.2 Basic Tutorials

Now follow some basic tutorials to help you get accustomed to using Calc. If you're new to using spreadsheet applications, make sure you try all these.

2.2.1 Using Sheets

A spreadsheet application is made up of multiple sheets, and you can switch between sheets at the bottom left of the Calc window.



Renaming, Inserting or Deleting sheets

You can rename sheets, insert new sheets, delete sheets, and more. Every new document you open contains three blank sheets; you can add data in any sheet, and link the data across sheets and even across spreadsheet files.

Just right-click on a sheet and choose whether you want to insert or delete a sheet, or rename or move / copy a sheet.

2.2.2 All About Cells

As we've mentioned before, everything in a spreadsheet is centred around cells and the data they contain. The real value of a spreadsheet lies in the relations you make between data in different cells. In order to make cells with different data appear different from others, you can format them to look different.

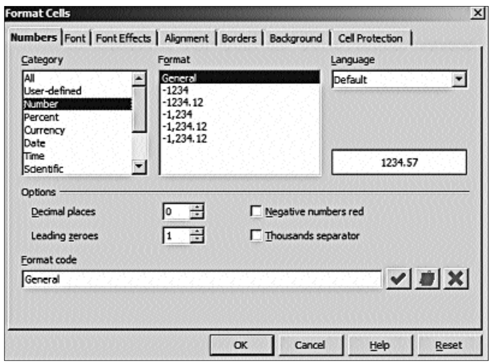
First, you have to learn to select cells. Selecting a single cell is easy—just click on it. Selecting a range of cells involves left-clicking on the first cell, then holding the left-click down and dragging the mouse to highlight the cells you desire. So if you want to select everything in columns A to E, from rows 1 to 10, click on the A1 cell, hold down the left mouse button and drag your cursor to E10.

However, you might sometimes want to select entire rows or columns. Say you want to select every cell in the columns A to E, you click on the letter A (the header of the A column), then press `[Shift]` and click on the letter E. You do the same thing for rows. Sometimes you may need to select a few cells that are not adjacent to each other; all you have to do is click on the first cell you want

to select, hold down `[Ctrl]`, and then keep selecting the cells you want. You can also use `[Ctrl]` to selectively highlight entire columns, rows, and even sheets.

The next step in formatting is to know the most basic tweaks you can apply to cells and the data they contain. These include font changes, sizing, background and font colour modifications, cell border changes, setting Bold, Italic or Underline, changing alignments (left, centre, right, justified), and more. All this you can achieve from the Standard and Formatting Toolbars with ease.

For advanced formatting options, you can select a cell, or a range of cells, and then right-click and select `Format Cells...` You will see the Format Cells dialog box where you can change all the above settings, and also change advanced settings such as how many decimal places a number in this (these) cell(s) should have, change the orientation of the data in the cell (you can set the data to go diagonally or downwards or upwards, etc.), and even choose to hide the cell(s) when printing.



Advanced cell formatting

You can merge two or more cells by selecting them and then going to `Format > Merge Cells`. To unmerge, just do the same thing: `Format > Merge Cells`.

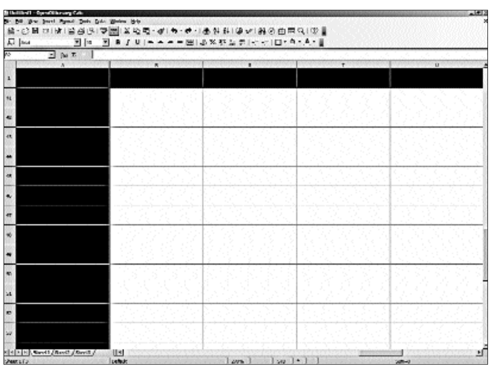
When working with a spreadsheet, you will often need to insert a row or column between existing data. You can just select

the row where you need to insert the new data, right click on the row number and select Insert Rows. The same applies to columns and also to delete rows or columns.

You can also change the size of a row or column to accommodate data better. To do this, say, when you need to increase (or decrease) a column's width, all you have to do is hold down the left click on the divider between the column's identifier (the letter D for column D) and the one to its right and drag it to make the column wider. The same applies to a row, and you drag the divider between the row you want to change the one below. If you want to automatically fit a column to the longest text in the cells of that column, just double click the same divider you would use to resize the column. The column is automatically fitted to accommodate the longest data string in a cell in that column.

2.2.3 Freezing Panes

When you enter in a lot of data, it will flow across multiple screens, either to the right of the screen (many columns) or run into many pages (many more rows than are visible on your screen). Spreadsheet users provide every column, and sometimes every row, with header identification. This is usually the first row of every column, or the first column of every row. When you scroll to see data that has flowed beyond your screen, however, you lose track of these headers, and may find yourself confused by which row or column is which. There's a simple solution to this, called freezing. In order to freeze headers (of either rows or columns or both) you need to select



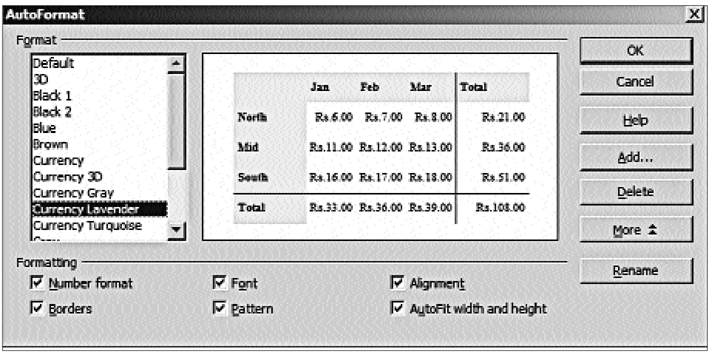
Here's an example where the first row and column are frozen

the cell where you can allow for scrolling. So say you want to freeze the first row and column—that is, row 1 and Column A—you need to select the cell B2 and then freeze panes.

Once you have decided on where you want to freeze the panes, you go to `Window > Freeze`. To unfreeze panes, do the same thing: `Window > Freeze`.

2.2.4 AutoFormat

Before you even begin a sheet, you can select from preset formats to make life easier. In order to use AutoFormat, open a new sheet and press `[Ctrl] + [A]` to select all the cells in the sheet. Now



Using AutoFormat to get the right look and feel to your sheet

go to `Format > AutoFormat` and you will see the AutoFormat dialog box. You can browse through and preview all the preset formats listed there, and when you find something that fits the data you're going to be entering, select it and click OK. You should know that AutoFormat is used mainly for visual styles of your sheet—don't expect complex formulas to be preset for you.

2.3 Formulas

Now we come to the meat of the matter. Spreadsheets are all about using formulas to correlate or compare data in cells to reach conclusions. It's all quite simply maths, of course, but you need to know how to go about doing this maths.

The first thing to remember about Calc is that you can use regular mathematical operators such as +, -, * and /. These correspond to add, subtract, multiply and divide, of course. There are much more complex ways of using formulas, and we'll get to some of those later.

2.3.1 The Basics

We said it's important to learn to identify cells, and here's why: you cannot work with formulas at all if you do not know which cells you're referring to.

Now, lets say you have two columns of values (A and B), and you want to subtract the values of B from A, and store the results in column C. Let's say the first values start from row 2, then you go to cell C2, and type in your formulas there. The formula is simple: "=A2-B2". If you wanted to add the values, the formula would be "=A2+B2". (All formulas start with the equals sign [=].)

Similarly, if you were multiplying the two values, you would have the value of C2 as "=A2*B2". If you want to divide the values in column A with the values in column B, use "=A2/B2".

The beauty of spreadsheet applications is that they get rid of repetitive tasks. So let's say in the example above, you have hundreds of values in column A and B, and need to fill in column C; if you sit and enter C2 as "=A2+B2" and C3 as "=A3+B3", etc., hundreds of times, you will get what you need, but it might have been simpler to do the calculations manually in the first place... Instead, all you have to do is enter the formula once in, say cell C2, then press `[Enter]`. After the formula is entered, just copy the

cell C2, select the cells from C3 down to the last value you need (corresponding to the amount of values in column A and B), and then press `[Ctrl] + [V]` (paste). This will automatically copy the formula and paste it in all the cells in column C. Remember this for all formulas you need to repeat across multiple cells.

2.3.2 Common Formulas

Apart from leaning how to use basic mathematical formulas, there are some very common formulas that you will find yourself using. First we'll help you take basic mathematical formulas further by introducing brackets.

Let's say your task is to add cell values of column A with column B and then multiply column C from the result, and you want to add the answers in column D. By using brackets, just as you would in maths, you can ensure that you always get (A+B)*C and not A+(B*C). The syntax is as follows: "=(A1+B1)*C1".

Of course, basic maths rules apply here too, so multiplication and division are always done before addition and subtraction. This means that if you're multiplying A and B and then subtracting C, you can just use the simple formula "=A1*B1-C1"; however, we suggest you get used to using brackets to make sure you always get the right answers.

Once you've learnt how to use brackets, you can move on to formulas that involve a lot more than a few cells, say, for example, adding and totalling all the hundreds of values in a column. It's fine to use formulas such as "=((A1+B1)-(D1-C1))*E1" when working with a few cells, but how do you calculate the total of, say, 300 cells in a column?

The SUM formula comes in handy here. We'll illustrate with a few examples below.

- =SUM(A1:A65536)" will find the total of all values in column A
- To find the sum of column A and subtract it from the sum of col-

umn B: "=SUM(SUM(B1:B65536)-SUM(A1:A65536))"
- To find the sum of the first 10 values and last 10 values in column A (which has, say, 100 data entries): "=SUM(SUM(A1:A10)+SUM(A91:A100))"

Other examples of commonly used formulas include:

=A1*25%	Find out 25% of A1
=ROUND(E3;2)	Rounds the value of cell E3 off to 2 decimal places
=LCM(A1;B1;C1)	Finds the lowest common denominator for the values in A1, B1 and C1
=COUNTBLANK(A1:A65536)	Counts the number of blank cells in column A
=TODAY()	Enter today's date

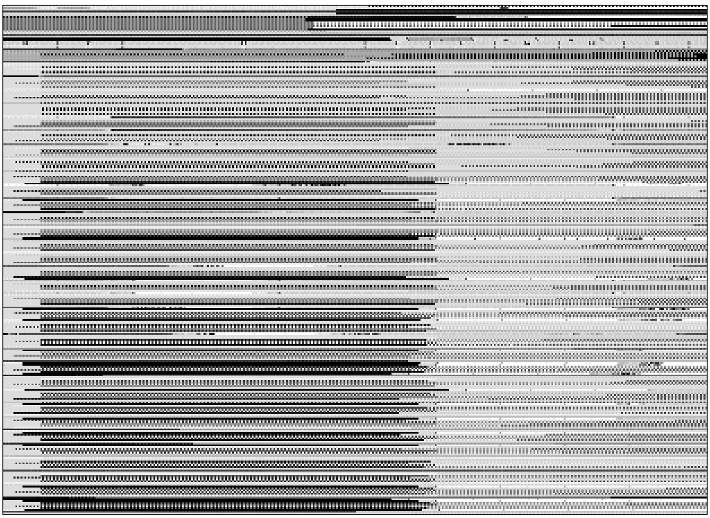
2.3.3 The Function Wizard

There are literally hundreds of formulas, and thousands, if not millions, of ways to combine them. Once you know what you're looking to do, you can use the Function Wizard to find the correct syntax. You should also browse through the Function Wizard to learn more about using formulas and understanding exactly what it is you can do with Calc.

To get to the Function Wizard, just click the "f(x)" button on the formula toolbar, or press `[Ctrl] + [F2]`. You will see the Function Wizard box, which has a list of functions on the left and explanations and syntax on the right. You will also see two tabs—Functions and Structure. The Functions tab is where you will find all the functions you might want to use, while the structure tab helps you get a better view of the function you are creating. The structure of the formula is displayed as a hierarchical representation to better understand what you're doing and also to help you identify problems or errors in your formula.

In the Functions tab, you will see a drop down dialog called Category. This is the way functions/formulas are segregated and

categorised in Calc. You will find categories for:
All: Every single function that Calc recognises
Database : Database-related functions
Date & Time: Everything to do with minutes, seconds, days, years, and dates
Financial: If it's rates of interest, accounting, discount calculations, or anything financial you need to calculate, you'll find the appropriate formula here.
Information: Using information about cells or data in the spreadsheet.

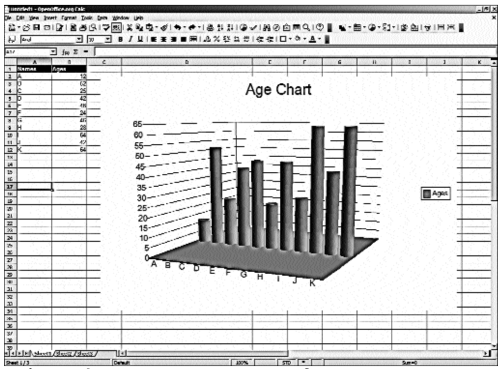


Using the Function Wizard

Logical: All the IF, AND, OR, FALSE and TRUE formulas
Mathematical: All the basic mathematical calculations
Array: To help you find trends in your numbers
Statistical: Formulas to give you statistics and more
Spreadsheet: To give you data about the sheet
Text: Functions to get data from text
Add-in: Inbuilt functions and formulas fore use with complex numbers

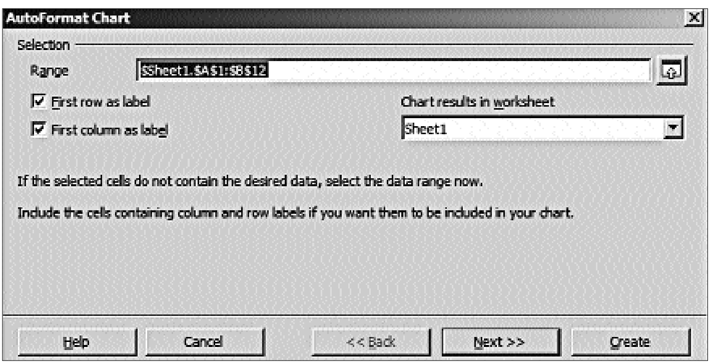
2.4 Charting

All values in your spreadsheets can be represented graphically as a chart. This is very important when you need to share this data with teams and colleagues. Charts make it a lot easier for people to interpret data and notice trends and patterns. There are quite a number of ways in which you can represent your data in charts, and there are various types of charts you can use. Which chart type you use depends solely on the type of data you're trying to represent.

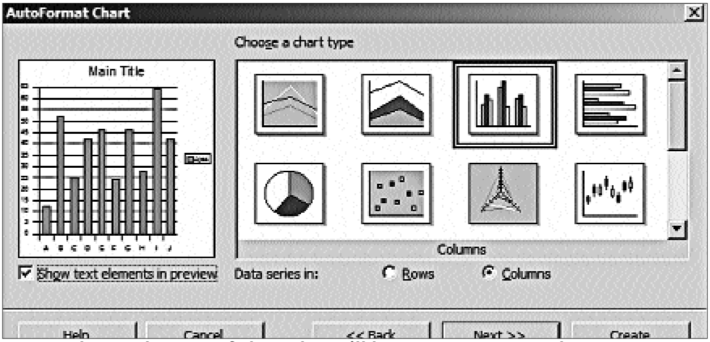


Using a chart to represent ages of a group

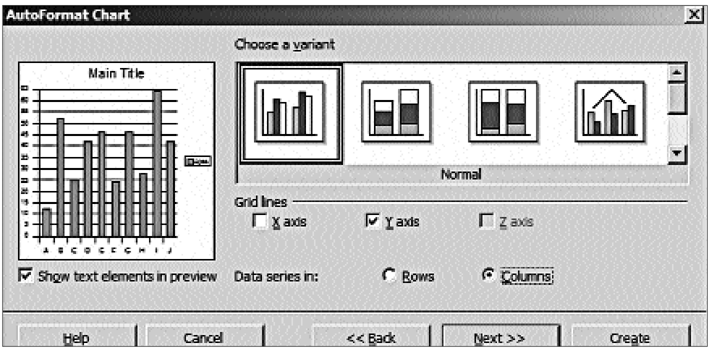
In order to insert a chart into your sheet, just select the data you want represented in the chart—including the headers, as descriptors—and then select `Insert > Chart`. Now follow the steps



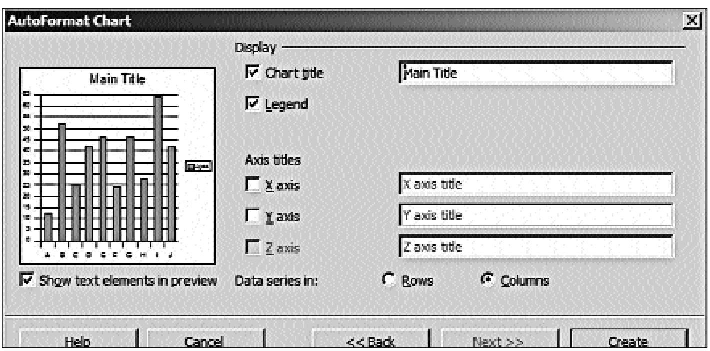
Step 1: When you see the AutoFormat screen, click Next. Only change the Range value if you omitted something.



Step 2: Choose the type of chart that will best represent your data



Step 3: Choose a variant of the chart type you've selected; also choose whether you want gridlines to be visible or not.



Step 4: Set the title of your chart. You can also change the X, Y and Z axes titles.

below to insert your chart.

Well, that's it, actually; you're done. Click Create to create your chart. You can resize the chart just as you would an image, and position it in your document.

2.5 Shortcuts

Here are a few shortcuts that will come in handy when using Calc.

Tip: Shortcuts

Shortcut	Result
Function Keys	
[F2]	Edit text.
[F3]	Edit group.
Ctrl + F3	Exit group.
Shift + F3	Duplicate
F4	Position and Size
F5	View Slide Show.
Ctrl + Shift + F5	Navigator
F7	Spellcheck
Ctrl + F7	Thesaurus
F8	Edit Points.
Ctrl + Shift + F8	Fit text to frame.
Arrow key	Moves the selected object or the page view in the direction of the arrow.
Ctrl + Arrow Key	Move around in the page view.
Shift + drag	Constrains the movement of the selected object horizontally or vertically.
Ctrl + drag (with Copy when moving option active)	Hold down Ctrl and drag an object to create a copy of the object.

Tip: Shortcuts

Alt Key	Hold down Alt to draw or resize objects by dragging from the center of the object outward.
Alt key + click	Select the object behind the currently selected object.
Alt + Shift + click	Select the object in front of the currently selected object.
Shift + click	Select adjacent items or a text passage. Click at the start of a selection, move to the end of the selection, and then hold down Shift while you click.
Shift + drag (when resizing)	Hold down Shift while dragging to resize an object to maintain the proportions of the object.
Tab key	Select objects in the order in which they were created.
Shift + Tab	Select objects in the reverse order in which they were created.
Escape	Exit current mode.
Enter	Activate a placeholder object in a new presentation (only if the frame is selected).
Ctrl + Enter	Moves to the next text object on the slide. If there are no text objects on the slide, or if you reached the last text object, a new slide is inserted after the current slide. The new slide uses the same layout as the current slide.
	When running a slideshow
Esc	End presentation.
Spacebar or Right arrow	Play next effect

or Down arrow or Page Down or Enter or Return or N	(if any, else go to next slide).
Alt + Page Down	Go to next slide without playing effects.
[number] + Enter	Type a number of a slide and press Enter to go to the slide.
Left arrow or Up arrow or Page Up or Backspace or P	Play previous effect again. If no previous effect exists on this slide, show previous slide.
Alt + Page Up	Go to the previous slide without playing effects.
Home	Jump to first slide in the slide show.
End	Jump to the last slide in the slide show.
Ctrl + Page Up	Go to the previous slide.
Ctrl + Page Down	Go to the next slide.
B or .	Show black screen until next key or mouse wheel event.
W or ,	Show white screen until next key or mouse wheel event.

In Normal View

Plus(+) Key	Zoom in.
Minus(-) Key	Zoom out.
Times(×) Key (number pad)	Fit page in window.
Divide(\?) Key (number pad)	Zoom in on current selection.
Shift + Ctrl + G	Group selected objects.
Shift + Ctrl + Alt + A	Ungroup selected group.
Ctrl + click	Enter a group, so that you can edit the individual objects of the group. Click outside the group to return to the normal view.
Shift + Ctrl + K	Combine selected objects.
Shift + Ctrl + K	Split selected object. This combination only works on an object

	that was created by combining two or more objects.
Ctrl + Plus key	Bring to Front.
Shift + Ctrl + Plus key	Bring Forward.
Ctrl + Minus key	Send Backward.
Shift + Ctrl + Minus key	Send to Back.

In Slide Sorter View

Escape	Moves the focus to the first slide.
Arrow key	Moves the focus to the next slide.
Spacebar	Makes the slide with the focus the current slide.

Impress

Impress is OpenOffice.org's tool that's akin to Microsoft's PowerPoint. Using Impress, you can create presentations that consist of text, tables, charts, graphics and more. This chapter will get you started with Impress, and help you *impress* your bosses and colleagues with your presentation skills—pardon us, but we're not the first, and will not be the last, to use that shameless pun!

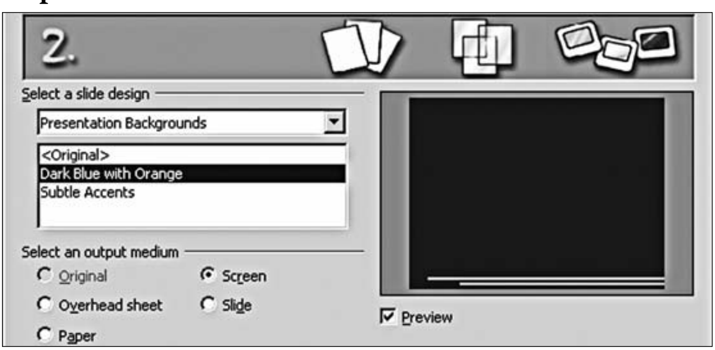
3.1 Getting Started

When you start Impress you will be greeted with a Wizard that will help you create a blank presentation based on the right template. In three easy steps, you can choose how to start your presentation:

Step 1

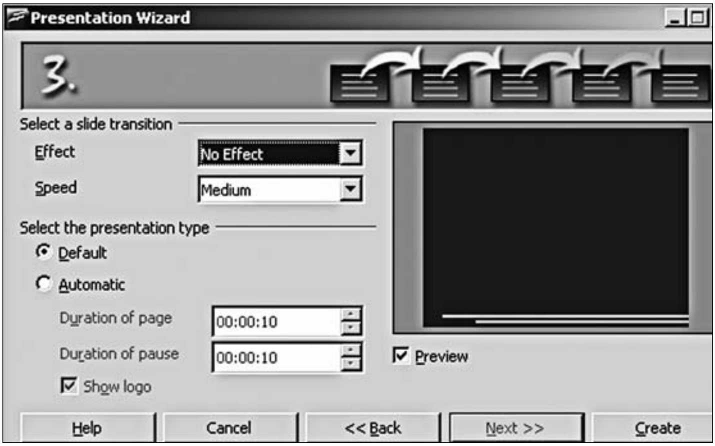
Choose whether you want to start an Empty presentation, choose a theme based on a template, or open an existing presentation. We're starting with a blank presentation, but you can choose a template design that has the look you desire

Step 2



Select the slide design for your presentation, and whether this presentation will be printed or viewed on a screen. Click Next to continue.

Step 3



Choose the default slide transition—the way slides will change; for example, you can choose that by default, slides will wipe away and reveal the next slide. If you choose a transition, you can also set the speed of the transition, and whether the slides change automatically, or whether the presentation waits for the user's input—mouse click or keyboard press.

Once you've got past these three steps, you will see the default Impress window with a blank presentation open, which contains one blank slide. If you chose a template, your slide will contain the default background of the template.

Now let's look at the Impress Interface before we begin making presentations.

3.1.1 The Interface

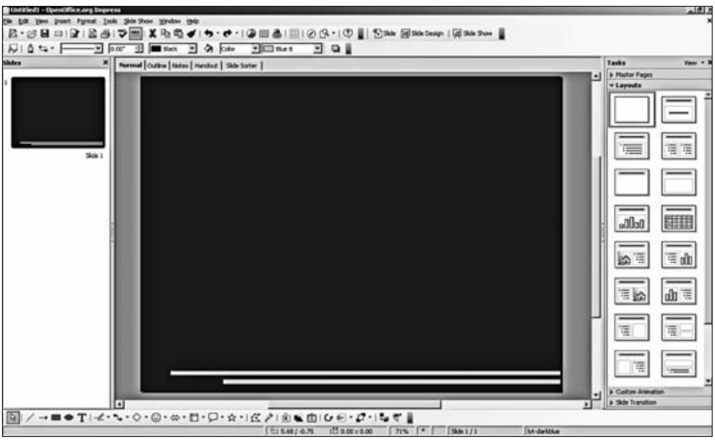
The main Impress window is divided into three panes—Slides, Workspace, and Tasks. The slides used in your presentation are displayed at the left of the screen. The centre is your workspace, and the place you will be making all your designs and writing text for your presentation. At the right you will find the tasks pane, which gives you control over master slides, layouts, animations, slide transitions, and more. Here's a gist of what you can do in each pane:

3.1.1.1 Slides Pane

This pane has thumbnails of slides in your presentation, in order from top to bottom—first slide on top and last at the bottom. To view a slide in the workspace, you can just click on it in the Slides pane. Using the Slides pane you can easily hide / unhide a slide, add / remove slides, rename them, move / copy slides and their contents to other slides, change transitions, change slide sequences, etc.

3.1.1.2 Workspace

On the top of the Workspace you will see five tabs—Normal, Outline, Notes, Handout and Slide Sorter. These tabs change the views of the Workspace (much like Print and Web layout do in Write). Of course, as usual, there are many more toolbars that



The Impress workspace is much like PowerPoint's

are hidden by default, and you can enable them by selecting `View > Toolbar` and choosing the toolbar you wish to work with—but for now we'll focus on the Workspace. Let's understand the different views you have:

Normal: This view is what you will use most often to change, format add and delete elements from your slides.

Outline: This view displays your slides as a bulleted list of titles. You can use it to easily identify slides by their titles and then rearrange them. You can also change titles and add new slides here just by pressing `[Enter]`. For example, if you know exactly how many slides you want in your presentation, and know the title to each slide, all you have to do is switch to Outline view, enter the name of the first slide, press `[Enter]` and you will see that a second slide is created automatically.

Notes: You can add your own notes to each slide to remember what that particular slide is about. These notes are not seen when the presentation is viewed as a slideshow.

Handout: If you want to print your slideshow for yourself, or if you want to print handouts for people, shift to the Handout view, and then from the right, select whether you want to display one, two, three, four or six slides per printed page. Obviously, one slide per page is quite simply just printing your presentation, but remember that the more slides per page, the smaller the thumbnails, and the less visible the details.

Slide Sorter: As the name suggests, this view displays the slides as thumbnails, and allows you to sort them easily. Just drag and drop a slide to change its position.

3.1.1.3 Tasks Pane

On the right, you will find the Tasks pane. This pane has four sections that you can access by clicking on them. These are:

Master Pages: These are like templates that your slides can be based on. By default, Impress ships with five master panes—Default, Dark Blue with Orange, Subtle Accents, Introducing a New Product, and Recommendation of a Strategy. The Default master slide is a simple blank slide template; the others have coloured backgrounds and font styles already applied to them. Master Pages are useful because if you're changing style, you can just make changes to the master rather than the whole presentation.

Layout: Impress has 20 inbuilt layout templates that you can choose from for your slide. Sadly, you cannot make and save custom layouts, but you can, however, apply the layout most fitting to your needs and then modify it. You should apply each layout once when you begin using Impress to better understand each one and learn where and when you may need to use them.

Custom Animation: This part of the Tasks pane allows you to add and remove animations to the objects contained in your slides. For example, if you want a headline on a slide to fly in from outside the slide, the Custom Animation tools are what you need to use to accomplish this.

Slide Transition: Here's where you choose how to animate the slides themselves—choosing how one slide leaves the screen and the other enters in the presentation.

3.1.2 Working The Views

This section is a quick reference for how to accomplish basic tasks when working in the different views of the Workspace.

3.1.2.1 Normal

When working in the Normal view, just select a slide from the Slides pane on the left to put it in the workspace. You can also use the `[Page Up]` and `[Page Down]` keys, as well as the up and down arrow keys. Another way to do this is to open the Navigator using `[Ctrl] + [Shift] + [F5]`.

If you've used a layout template, you will see descriptions on each box—text, graphics, or object—telling you to "Click to add text" or something similar. This is self-explanatory. In the Normal view you will see the Drawing toolbar at the bottom of the Workspace. Using this you can add more text, images, and objects, or even draw shapes. More on this later.

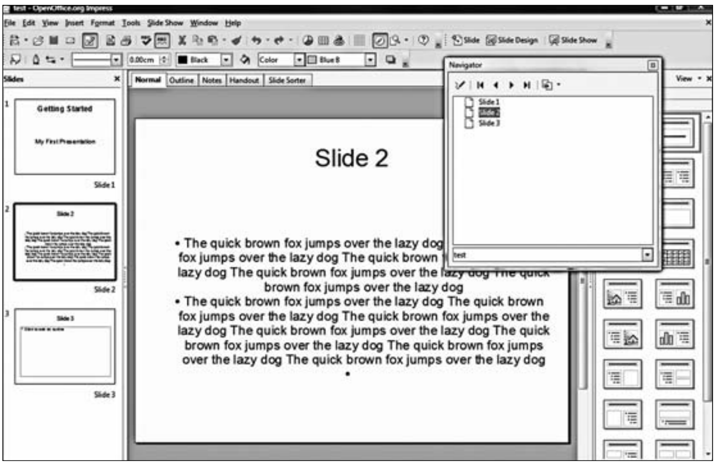
3.1.2.2 Outline

The Outline view shows only the slide titles and the text that they contain. This makes it easy to add slides and provide them with a

title. To insert a slide between, say, slide one and two, just click on Slide 2 in the outline view and press `[Enter]`. Type in the title of the slide and you're done. If you have used a layout template, you will be able to edit the text as well in the outline view, but it's just a lot easier to do it from the Normal view itself.

3.1.2.3 Notes View

The notes view, as mentioned earlier allows you to add notes for your own personal reference—since they are not displayed in the



Using the Navigator to see your slides

slideshow. To add a note, switch to the notes view and you will see the currently selected slide with a box below that says "Click to add notes". Just click on that box and add the notes you desire. To switch between slides, just use the Slides pane or use `[Page Up]` and `[Page Down]`. Press `[F11]` to open the Styles and Formatting window to change font styles, or just use the Formatting toolbar on the top.

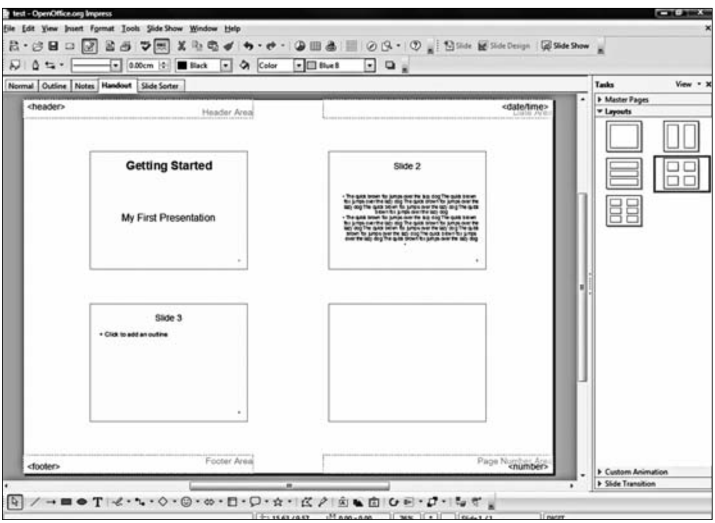
3.1.2.4 Handout View

We've already told you what the Handout view is used for; now it's time to print from it. When you select the Handout view, by

default the Tasks pane on the right changes to Layouts and displays one, two, three, four or six slides per page. Select the view you want, press `[Ctrl] + [P]` to open the printer dialog box (also achievable using `File > Print`) and click on the Options button on the bottom left. Check the Handouts box from the Contents options and uncheck the Drawing box. See if you want to change any other settings and click OK. Now select the number of pages you want to print and press OK.

3.1.2.5 Slide Sorter View

When in the Slide Sorter view, you will see the Slide View toolbar on the top. This includes a field called Slides Per Row. There is no text that identifies it, but you can't miss it because it shows the number of slides selected for the current view—"4 Slides", "6 Slides", etc. In case you cannot see this toolbar, go to `View > Toolbars > Slide View` to enable it. You can adjust this if you want to accommodate all the slide thumbnails into your screen area. You can select between 1 and 15 slides per row.



Use the Handout view to print, umm, handouts

In order to move a slide around, just select it and then drag and drop it into the position you want to move it to. To select and move multiple slides, hold down [Ctrl] when selecting them. As usual, if you want to select and entire sequence of slides (say slide 3 to 20), you can just click on slide 3, hold down [Shift] and click on slide 20. In the Slide Sorter view, you can right-click to achieve some basic tasks: adding, deleting and renaming slides, applying transitions and hiding, cutting, copying and pasting a slide.

3.1.3 Tools

You can enable and disable toolbars by selecting View > Toolbars, and selecting the toolbar you wish to hide / show. If the toolbar is already shown, there will be a checkmark to the left of its name, and selecting it again will hide it. We've already mentioned how to use toolbars in Chapter 1—go through that again if you aren't clear on that. Besides, every button on a toolbar has a tool-tip that informs you about what it is. You can, and should, turn on extended tooltips if you are a novice—this will provide you with more detailed tooltips that will explain what each button does. Turn on extended tooltips by selecting Tools > Options, choosing General from the OpenOffice.org category on the left, and checking the Extended tips box and clicking OK.

3.2 First Impressions

You now know all you need to know in order to start creating your first presentation. Planning is very important, and most people still prefer the good old paper and pencil way of planning a presentation. First things first: you need to know how many slides the presentation will contain and what the subject matter will be. Based on this you can use the Layout templates to create your slides. We'll assume you've used the Presentation Wizard we've spoken about in the beginning of this chapter to make your blank presentation. Remember that you should use the Outline view to plan your presentation and give descriptive names to each slide so that they're easily identifiable.

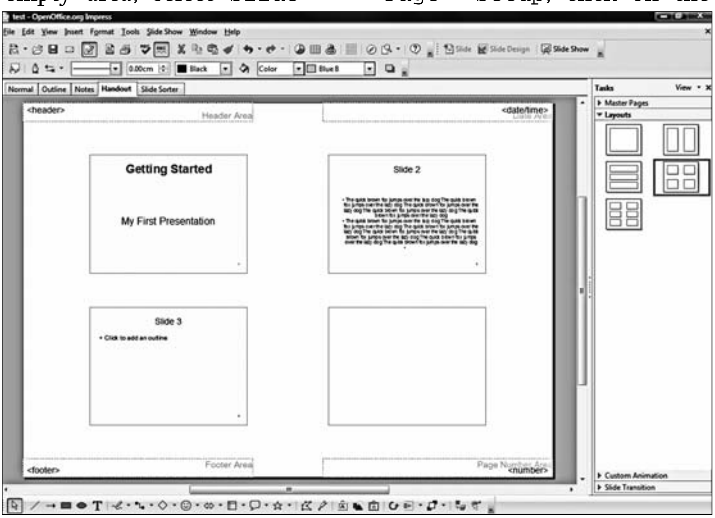
3.2.1 Your First Time

We're assuming that you're starting with a blank presentation based on the Default template of Impress. What you have before you is a blank slide and you need to start making your presentation. Usually, the first slide is used as the title slide, where you name your presentation, add your company logo etc., and we'll continue with this premise.

If you want to, use the Layouts option in the Task Pane to select a layout for your title slide. If not, just start adding elements such as a title, text or images, logos, etc. All you have to do is click on the title box and you will be able to edit the text and provide a title. You can change the font, font colour, size, set bold, italics and underline and do all the regular text formatting we've shown you in Chapter 1.

3.2.1.1 Inserting Stuff

In order to insert an image, go to `Insert > Picture > From File...` and choose an image to insert into the presentation. The same applies for spreadsheets, charts, objects and frames. In order to change the background colour of a slide, right-click on an empty area, select `Slide > Page Setup`, click on the



Enable the toolbars you need

Background tab and then the Fill dropdown, and select Color. Choose the colour you want to set for the slide and click OK. You will be prompted to choose whether to set the same colour for all the slides in the presentation, if you wish to do so select Yes. If you choose No, only the current slide will be provided that background colour. Instead of a colour, you can also choose between a gradient, hatching (lines) and from preset bitmaps.

3.2.1.2 Modifying Slides

We've already told you how to add, move and delete slides. In the Normal view, just use the Insert menu to add slides. Another thing you need to know about is the `Insert > Duplicate Slide` option—this will duplicate the slide, its styles and its contents to form a new, identical slide after the one you had selected.

3.2.1.3 Viewing Your Presentation

You may want to view your presentation after you're done, or even after adding just a few slides. To do this just click on `[F5]` or `[F9]`. Your slideshow will play in full-screen mode. Use the left-click to

Inserting elements into your presentation

go to the next slide, and you can also use the arrow keys to move between previous and next slides.

Note: Although you can add transitions while you create each slide, we prefer to create the whole presentation by adding in and placing all the elements and then deciding on slide transformations and object animations. If you want skip ahead, we have described animations later.

3.2.2 Master Slides

The key to using any presentation software lies in knowing how to use master slides. These are like templates that slides are based on, and can save you a lot of trouble and time. Let's say you're creating a presentation for work, and you need to have your company logo visible on every slide on the top left hand corner, instead of placing the logo in every slide, you can just put it into the master slide. This also helps your presentation look more professional—if you try placing the logo manually in every slide, and don't get the placement exactly right, the logo will appear to shift in each new slide.

3.2.2.1 What Do Master Slides Control?

The answer to that question is, quite simply, everything—everything but the actual contents of slides, that is. Using a master slide you can set default background colours, graphics, gradients, headers, footers, placement of frames (text, image or otherwise), text formatting, etc. This is especially useful when, say, you want to change every text box to a new font—instead of doing it manually, you can just change it in the master slide and the text boxes that are based on that master will automatically change throughout the presentation. Of course you ~can~ change text boxes without changing the master slide, but once you do so that text box will no longer be tied into the master slide—so you will always have to change any formatting in that box separately.

3.2.2.2 Access The Masters

Impress comes with five inbuilt master slides. You can see them in the Master Pages section of the Task pane. You will see three sections

here, `Used in This Presentation`, `Recently Used`, and `Available for Use`. To set your presentation to use one of the master slides, just double-click on the master. All slides in your presentation will be updated to use that master slide as a template.

3.2.2.3 Creating A Master

You don't have to be content with the five default master slides that come with Impress, and you should make your own for your presentations. Creating a new master slide is the same as editing an existing master slide. Just go to `View > Master > Slide Master`, and the current master slide will be opened in the Workspace. If you want to start with a blank master slide, make sure you set the current slide to the Default master slide. When editing a master slide, the Master View toolbar opens up. The first icon is the New Master button which will let you create a new master slide. You need to use this option to make a new master slide. When you click this button, a second slide will appear in the Slides pane. Select that and edit it.

Use the Master Pages option in the Tasks pane

Once you're done editing the new slide, right-click on it to rename it, and change the name from "Default1" (or whatever) to something you will remember it by. Finally, just click Close Master View from the Master View toolbar and your master slide will be available in the Tasks pane under `Master Pages > Used in This Presentation`.

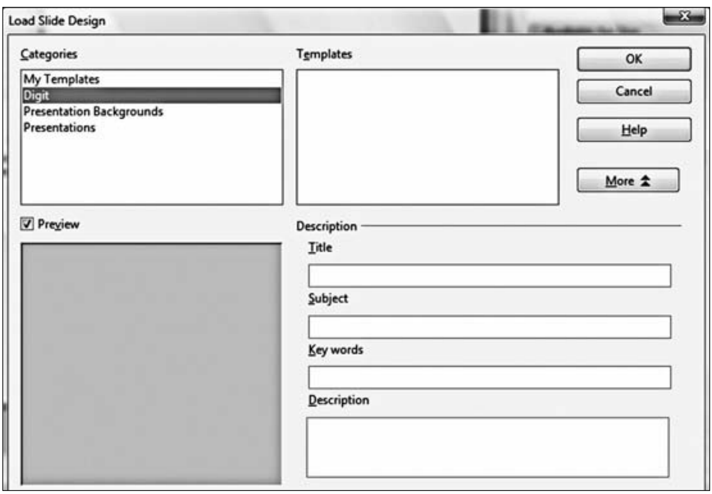
3.2.2.4 Loading A Master

By default, Impress only saves master slides that you've created in the document you created that master slide in. What happens when you want to access a previously created master slide in another document? To do so, you need to select `Format > Slide Design`; in the Slide Design dialog box, look for the `Load...` button at the bottom right. You should see the previously-created master slide

design here, select it, click OK twice, and it will be added to the current document.

3.2.2.5 Using Master Slides

Once you're comfortable working with slides, formatting, and adding objects, pictures, spreadsheets and charts, you can start using master slides to apply common themes and add logos, headers footers, date and time place holders, and more. We've already shown you how to edit a master slide; now it's time you learnt how to add a logo to your master slide. Just go to `View > Master > Slide Master`, create a new master or edit one you've already created (make sure you don't edit the default five that come with Impress), and use `Import > Picture > From File...` to insert the logo into your master slide. When you're done, apply the master to your presentation and you will see that the logo is present in all your slides. Use the same technique to make any other object or formatting permanent in all your slides.



Loading a Master Slide from another presentation

3.3 Templates

The advantage of working with an office suite is that almost all the tools of the suite have a lot in common. You will find that working with templates is no different in Impress from, say, Writer. Since we've already explained templates in Writer, we'll skip past the basics and get on to a little more advanced template working.

3.3.1 Making Templates

You can create your own templates easily with Impress. All you have to do is format and save a presentation, then go to `File > Templates > Save`, and in the New Template box, type out a name for your template. Select the category which you want to make your template part of and click `OK`; the template will be saved. It really is that simple; of course, you have to do all the hard work of formatting a presentation or slide, applying formats and styles and setting fonts, colours and backgrounds, all before saving as a template.

3.3.2 Using Templates From Existing Files

Once you've used Impress, you will easily learn how to use the default templates that come with it. However, now that you have created your own templates, how do you apply them to a presentation that you are currently working on, or even a new presentation you're going to create? This even works for installing templates that you have downloaded and installed...

First we'll show you how to install a template using the Extensions Manager. Select `Tools > Extension Manager`, click `Add`, browse to the downloaded templates file, and click `Open`. Now select which template you want available to you and then click Enable. This template will now be available to you when working in Impress. The Extensions Manager is common for all OOo tools.

In order to set a custom default template, go to `File > Templates > Organize`, and on the left, browse to the folder that contains your template. Click on the Commands button and select "Set As Default Template". If you want to reset the template to OOo's

default template, just go to `File > Templates > Organize`, click on Commands and then select `Reset Default Template`.

You can also organise all your templates into descriptive folders using the same method. Just select `Commands > New` to make a new folder and then save your templates there—drag and drop templates from one folder to another.

3.4 Graphics

Text is easy to work with in Impress, and is not at all different from working with text in Writer. Images, however, are a lot more important to presentation tools than word processors, so we'll skip past the how to work with text bit and get straight into working with images.

3.4.1 Gallery

You'll find OOo comes with a lot of default pictures for you to use in documents, spreadsheets or presentations. You need to look at the OOo Gallery before you go off hunting for images online or elsewhere. Select `Tools > Gallery` to open the image gallery.

If you find something you like, just drag it from the gallery to your workspace. You can resize it once it is in your slide. To add more themes to the Gallery, go to the Gallery and click New Theme. Click on the General tab and type in a name for the new theme, like, say, Animals. Now click on the Files tab and then click the Find Files... button. Browse to the folder you want to add and then click OK. Now click Add All to add all the files to your new Gallery theme. If you want to add only a few files, select them and click Add instead of Add All. Click OK to exit the New Theme box. Now all those images will be available to you in the Gallery.

3.4.2 Playing With Pictures

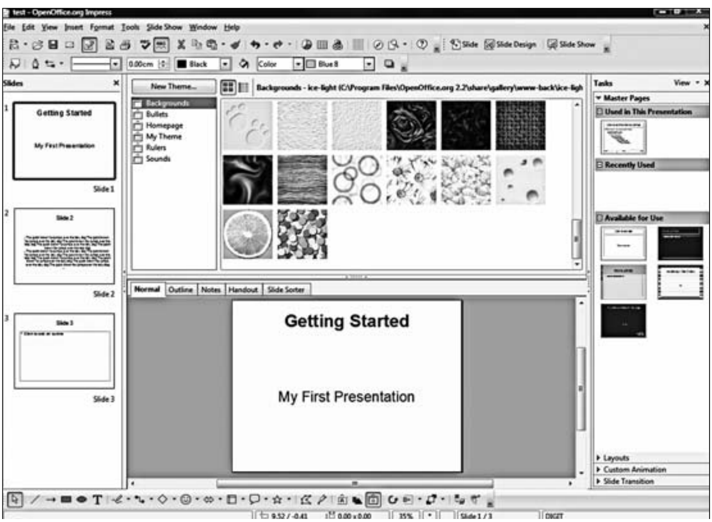
When you add an image to the slide, you might need to move it about. Just click once on the image to see the green handles. Hover the mouse over one of the corner handles and drag it to enlarge /

reduce the size of the image. If you want to preserver the proportions of the image, press and hold `[Shift]` when resizing. In order to rotate a picture, select it, then select the Rotate button from the drawing toolbar and then rotate the image as desired.

You can achieve basic formatting using the picture toolbar. You can enable this toolbar by going to `View > Toolbars > Picture`, but it is usually available as soon as you select a picture.

The first button on the Picture toolbar is the Magic Wand button, and if you click it you will see various options or filters tat you can apply to your image. Below is the list of options and what they do:

Invert:	Inverts the image to give a negative effect
Smooth:	Softens the contrast levels
Sharpen:	Increases the contrast
Remove noise:	Removes pixels from an image to make it look clearer



Using the Gallery to insert pictures and backgrounds

Solarization:	Makes the picture look like it was taken in very high lighting conditions
Aging:	Makes you image look like a photograph that was clicked decades ago
Posterize:	Makes your image look like it was painted on an easel
Pop Art:	Use it to understand; applies some weird effect we can't explain...
Charcoal:	Makes your image look like it was sketched using charcoal
Relief:	Add a light effect to a picture that causes it to look embossed
Mosaic:	Makes the image look blurry and made up of mosaic tiles

Next you will see a drop-down called "Graphics mode". This has four options: Default, Grayscale, Black / White, and Watermark. Default is the original image, Grayscale converts it into shade of grey, Black/White makes all dark areas black and all light areas white, and finally, Watermark reduces the opacity of the image to add it to the background.

The next button on the toolbar is Color. Use this to adjust the colour settings of the image. Then there's the Transparency button, which lets you adjust the transparency or opacity of the image. You need to remember that the higher the level of transparency, the less visible it is. The last icon on the Picture toolbar is the Crop button, which you can use to cut out areas of the picture you don't need.

3.4.3 Image Maps

An image map is coordinate data that adds a hyperlink to a part of an image. Say you want to only the D in the *Digit* logo to link to **www.thinkdigit.com**. You can achieve this using image maps.

To do this for an image, select the image and then choose `Edit > ImageMap`. Use the drawing tools to select a portion of your image you want to hyperlink, and then add the Address (URL), the

Text that is seen on mouse-over, and then click the green checkmark to save. Close the dialog box and your image will now contain an image map. You can add multiple image maps into one image—to, say, link each letter of the word *Digit* to different URLs.

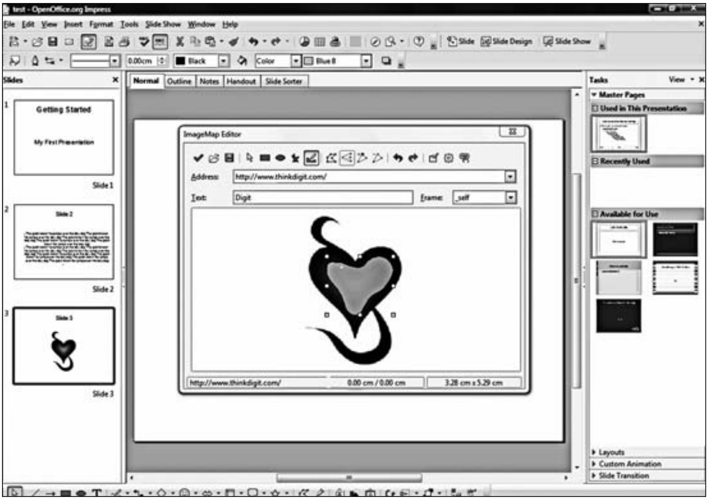
3.5 Working With Slideshows

Once you have all the elements of your presentation, you can think of animating them and looking at the presentation as a slideshow instead of just a bunch of slides. Presentation tools are all about animation and interactivity, and since presentations are usually just accessories to help you deliver a report better, you need to tie it in with what the speaker will be saying. Transitions will help the presentation look a lot better than just slides changing, and animation for objects will help drive home the points you wish to. The experts can make presentations that are timed to perfection with a speakers lines so that content appears only when wanted, like, say, if you're trying to drive home five important points, for emphasis, you can have each point appear in the slideshow only when the presenter mentions them.

Using the Picture toolbar to edit an image

3.5.1 Transitions

The most basic form of animation in presentations is transitions. This is basically the way in which the slide on screen leaves the window and the next slide appears. By default, the slides just change on screen, but using Impress you can animate the "transition."



Making an image map

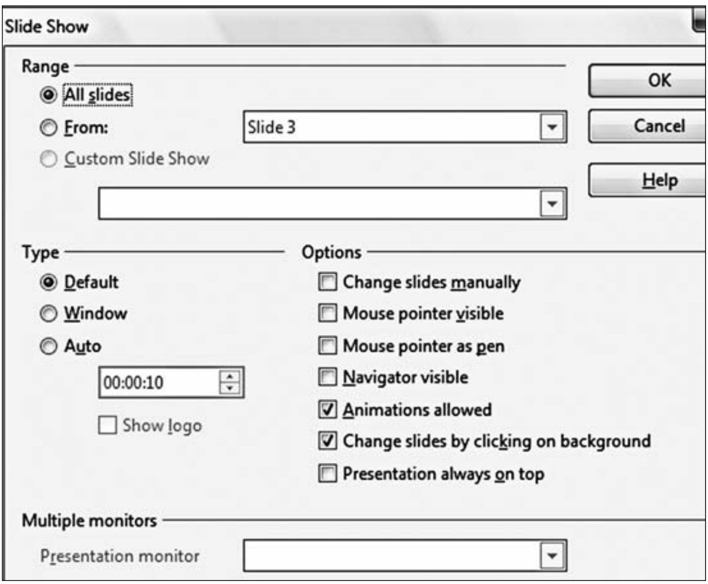
3.5.1.1 Slide Show Settings

Select `Slide Show > Slide Show Settings`. Here, in the Range section, you can choose to include all slides or select which slides to include in your slideshow. You can also change the sequence of the slides by selecting Custom Slide Show. Under Type, you can select the way the show is displayed: Default shows the slideshow in full screen and exits after the slideshow is done, Window runs the slideshow in the OOo window and exits after the last slide is shown, Auto loops the slideshow, and you can select the time between after the last slide is shown and the slideshow repeats itself.

Apart from this, there are a few checkboxes that you can select to change the behaviour of the slide show:

Change slides manually:	Ignore all settings and force user interaction to change slides.
Mouse pointer visible:	Choose whether the mouse pointer is visible during the slideshow. You will need this if you have inserted hyperlinks and image

	maps into your presentation.
Animations allowed:	If you've included animated GIFs into your presentation, this option will display them as animations.
Presentation always on top:	Prevent other programs from stealing focus from the slideshow—anyone who's given a presentation and had it end midway because some software stole focus from the presentation obviously did not use this option.



Using Slide Show Settings to control animation

3.5.1.2 Changing orders

You can change the order in which slides are shown in the slideshow, no matter how they are placed in Impress. To do so,

select `Slide Show > Custom Slide Show`, and click `New`. You will now see the `Define Custom Slide Show` dialog box, where you can type in the name for your custom slideshow. In the Existing Slides list, use `[Ctrl]` or `[Shift]` to select individual or groups of slides respectively. Click the >> button to add them to the Selected slides list. You can rearrange slides by dragging them up or down to get the order you desire. Click OK when done and then check the Use Custom Slide Show box.

3.5.1.3 Adding Transitions

Transitions can be added from the Normal view and also the Slide Sorter view. It's better to add the transitions from the Normal view though, because you can see the effect of the transition when you select it.

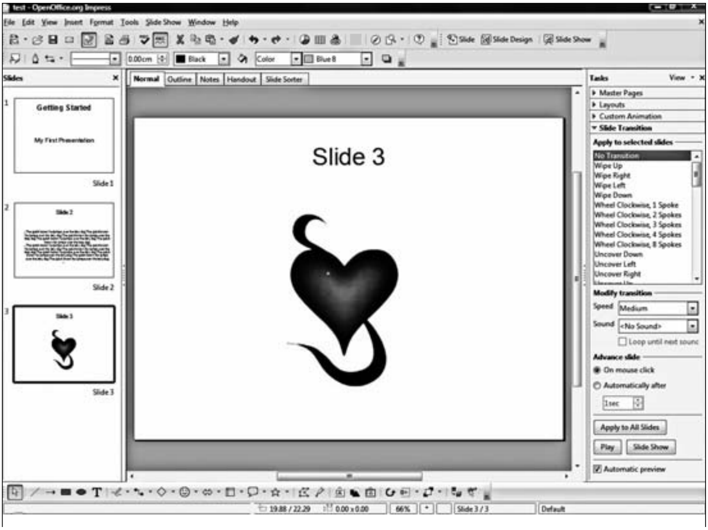
In the Tasks pane, you will see the option Slide Transition at the bottom. Selecting this will give you control over the transitions for the current slide. You can also just right-click on a slide and select Slide Transition to display the same options in the Task pane.

You can apply one single transition to all the slides in the presentation, or even choose to give each slide its own unique transition—this doesn't look too professional though. You can use two or three different transitions throughout the slideshow though.

In the Tasks pane (under Slide Transition) you will see various options. We'll explain each one:

Apply to selected slides: This is the list of available transitions, and you can select which one you want. If you want to apply the same transition to all slides, you can just select them all and then choose a transition, or you can just click Apply to All Slides at the bottom.

Modify transition: Here you can set a transition's speed and choose whether you want a sound to be played when the transition occurs. You can also loop the sound, forcing it to play over and over, until the next sound event.



Changing the order in which slides play

Advance Slide: Using this you can choose whether a mouse-click is required to go to the next slide or whether the slide changes automatically after a time frame you can define. Using this option for individual slides, you can have groups of slides that automatically progress to the next, but at key points in your presentation you can set it to require a mouse-click so that the presentation does not progress to the next point without the presenter telling it to.

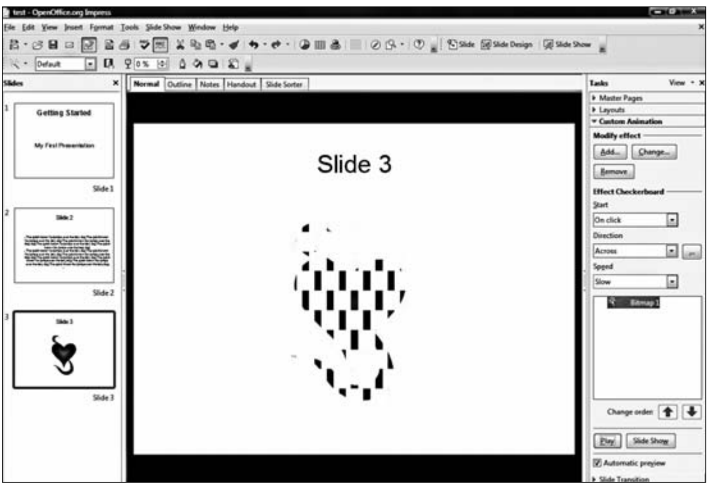
3.5.1.4 Rehearsing Timings

A cool feature you just have to try is the Rehearse Timings option, which you can access by selecting `Slide Show > Rehearse Timings`. If all your slides are set to automatically progress, this will come in handy when trying to tie in a speech with the slideshow timing. To use this feature, set all slides to automatically progress, and put a large value in the "Automatically after" setting—say 60 seconds. Don't worry, you're not going to have to wait that long when rehearsing timings. Now, go to `Slide Show > Rehearse Timings`, and you will see that the slideshow starts in

full-screen mode, and that there's a little timer at the bottom left of the screen. Place your cursor over this timer and then start reading your slides. Read them at normal pace as fast as you would expect someone who is reading this for the first time to read. Better still, get someone who hasn't seen your presentation before to sit down and do this for you. The idea is simple: once you are (or the friend / colleague is) done reading each slide and wants to move to the next, click the timer. It's that simple. So even if you're trying to sync your speech with the slide timings, use this method.

3.5.1.5 Remove Transitions

In order to remove a transition from one or many slides, just select the slide, click Slide Transition in the Task pane, and select No Transition as the transition effect. If you want to remove transitions completely from your presentation (all slides), just click on any slide, select No Transition, and click Apply to All Slides.



Using the Slide Transition options from the Task pane

3.5.2 Custom Animations

Transitions are meant for slides; however, Impress lets you animate each and every object if you want to. Using Custom

Animations, you can do things like make your logo fly in from the left, make typewriter sounds, and have letters appear on screen as if they are being types... just about anything is possible, depending on how much patience you have and how good you are at story-boarding and animating.

You need to remember, however, that a little too much animation will distract from the content and might even become a little irritating. Plus, you have to worry about making your presentation look professional, and not something some school-kid made. Custom Animations gives you the power, but with great power comes great responsibility—use the force, Luke, but do so wisely!

3.5.2.1 Adding Custom Animations

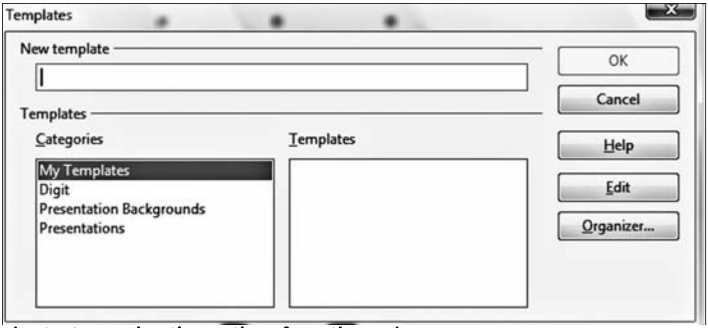
You can add animations by clicking on Custom Animation in the Task pane, then selecting the object you want to animate. Now click Add, and choose an animation. There are many options available and you can add several animations one after the other. Right-click an animation and select whether you want it to Start On Click, Start With Previous, or Start After Previous. This means that you choose whether you want the animation to wait for a click before it happens, start at the same time as the previous animation, or occur automatically after the last animation—you can choose how long after the previous animation the current one will occur.

3.5.2.2 Advanced Effects

If you look at the Custom Animation options, you will notice a button titled [...] in the Effect options next to the Property dropdown that is greyed out by default. Clicking on [...] will open the Effect Options box. Here, you'll see two or three tabs (depending on whether you're animating a text box or another object) called Effect, Timing, and Text Animation.

Under the Effect tab, you can select directions, sounds to play, whether to animate the text as one whole set, word by word, or even letter by letter. You can also change the direction of the ani-

mation and select whether to accelerate at the start and/or decelerate at the end. Everything under the Timing tab is self-explanatory, as are the options under Text Animation.



The Custom Animation options from the Task pane

3.5.2.3 Interaction

It's not necessary that clicking the mouse button in a presentation takes you to the next slide. Interactions are exactly this, the interaction of the slideshow with a given action—a mouse click. Interactions such as going to previous/next/first/last slide, going to a page/object/document, playing a sound, or even running a macro are all possible using Impress.

To set an interaction for any object, just right-click it and choose Interaction. You will see the Action at mouse click option with a drop down next to it. There are many options in the drop down and most are self explanatory. For example, the Go to page or object selection will display a Target field below, where every slide and every slide's contents (objects) are listed. Choose the object you want to go to and click OK.

An example is creating a close button for your presentation. If you place the close button at, say, the top right corner of the master slide, it will be present in all your slides. In order to make it act like a close button, you can set the interaction to `Exit presentation`, but remember to set `Mouse pointer visible` under

`Slide Show > Slide Show Settings` in order for the close button to be of any use.

3.6 Shortcuts

We'll list out keyboard shortcuts in this section. However, we should tell you that you can actually change the default keyboard shortcuts, if you want to, in order to make commonly used tasks easier by setting key combinations that are easier for you to remember. To do so, select `Tools > Customize`, click on the Keyboard tab, and make sure the radio button on the right selects Impress and *not* OpenOffice.org. This will ensure you're changing shortcuts only for Impress and not for the entire OOo suite. You can, of course, choose to make your changes global (as entire OOo settings), but if you don't know what you're doing, we strongly recommend you refrain from this.

In the Shortcut keys section, look for a free shortcut key, or just select one that has a shortcut assigned to it, and click Delete. This will delete the shortcut that was already associated with that key combination, and will allow you to create a new shortcut. Select the key combination, then select the Category you want as well as the Function desired. Then click Modify to apply your shortcut. Let's take an example.

Say you want `[Insert]` to be associated with the action `Insert > From File`. We chose `[Insert]` because it doesn't have anything associated with it by default. Click in the Shortcut keys section and press `[Insert]`; you will see that Insert is selected in the Shortcut keys list. Now click Insert in the Category list and then From File in the Function list. Click Modify and you will see Insert appear in the Keys list. Click OK to exit.

Before you make any changes in the shortcuts, it's wise to save all the settings. To do this, click Save and provide a filename and a .txt or .conf file extension. If you mess up, you can always use the Load button to restore these default settings.

Shortcuts

Shortcut	Result
Function Keys	
[F2]	Edit text.
[F3]	Edit group.
Ctrl + F3	Exit group.
Shift + F3	Duplicate
F4	Position and Size
F5	View Slide Show.
Ctrl + Shift + F5	Navigator
F7	Spellcheck
Ctrl + F7	Thesaurus
F8	Edit Points.
Ctrl + Shift + F8	Fit text to frame.
Arrow key	Moves the selected object or the page view in the direction of the arrow.
Ctrl + Arrow Key	Move around in the page view.
Shift + drag	Constrains the movement of the selected object horizontally or vertically.
Ctrl + drag (with Copy when moving option active)	Hold down Ctrl and drag an object to create a copy of the object.
Alt Key	Hold down Alt to draw or resize objects by dragging from the center of the object outward.
Alt key + click	Select the object behind the currently selected object.
Alt + Shift + click	Select the object in front of the currently selected object.
Shift + click	Select adjacent items or a text passage. Click at the start of a selection, move to the end of the selection, and then hold down Shift while you click.

Shift + drag (when resizing)	Hold down Shift while dragging to resize an object to maintain the proportions of the object.
Tab key	Select objects in the order in which they were created.
Shift + Tab	Select objects in the reverse order in which they were created.
Escape	Exit current mode.
Enter	Activate a placeholder object in a new presentation (only if the frame is selected).
Ctrl + Enter	Moves to the next text object on the slide. If there are no text objects on the slide, or if you reached the last text object, a new slide is inserted after the current slide. The new slide uses the same layout as the current slide.
When running a slideshow	
Esc	When running a slideshow End presentation.
Spacebar or Right arrow or Down arrow or Page Down or Enter or Return or N	Play next effect (if any, else go to next slide).
Alt + Page Down	Go to next slide without playing effects.
[number] + Enter	Type a number of a slide and press Enter to go to the slide.
Left arrow or Up arrow or Page Up or Backspace or P	Play previous effect again. If no previous effect exists on this slide, show previous slide.
Alt + Page Up	Go to the previous slide without playing effects.
Home	Jump to first slide in the slide show.
End	Jump to the last slide in the slide show.

Ctrl + Page Up	Go to the previous slide.
Ctrl + Page Down	Go to the next slide.
B or .	Show black screen until next key or mouse wheel event.
W or ,	Show white screen until next key or mouse wheel event.

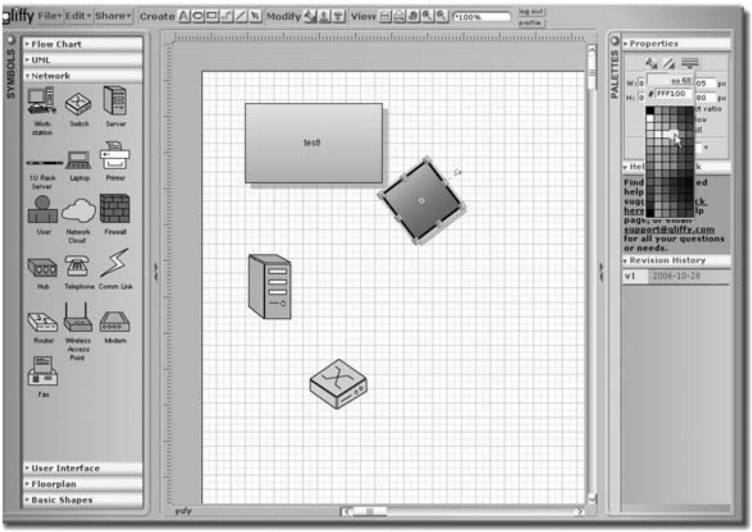
In Normal View

Plus(+) Key	Zoom in.
Minus(-) Key	Zoom out.
Times(×) Key (number pad)	Fit page in window.
Divide(⁄?) Key (number pad)	Zoom in on current selection.
Shift + Ctrl + G	Group selected objects.
Shift + Ctrl + Alt + A	Ungroup selected group.
Ctrl + click	Enter a group, so that you can edit the individual objects of the group. Click outside the group to return to the normal view.
Shift + Ctrl + K	Combine selected objects.
Shift + Ctrl + K	Split selected object. This combination only works on an object that was created by combining two or more objects.
Ctrl + Plus key	Bring to Front.
Shift + Ctrl + Plus key	Bring Forward.
Ctrl + Minus key	Send Backward.
Shift + Ctrl + Minus key	Send to Back.

In Slide Sorter View

Escape	Moves the focus to the first slide.
Arrow key	Moves the focus to the next slide.
Spacebar	Makes the slide with the focus the current slide.

Draw

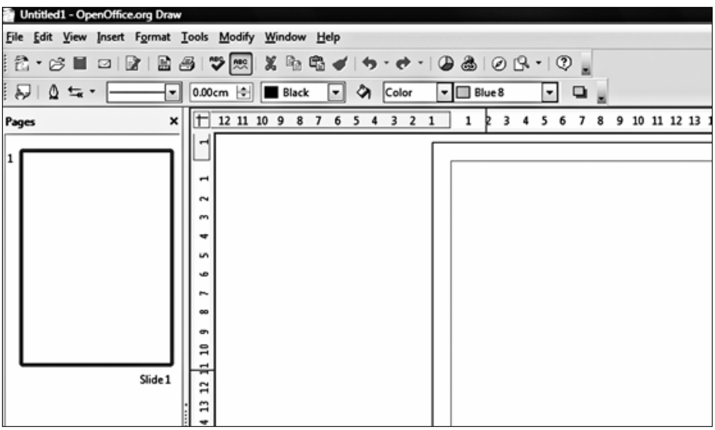


Draw is OpenOffice.org's vector drawing tool. Using Draw, you can create various types of vector graphics, from flowcharts to complex plans and even floor plans for exhibitions. Quite simply, if there's something you want to plan visually, Draw will let you... umm... draw it.

4.1 Look And Feel

In what follows, we will skip past the basics that are common to all OOo applications. If you find yourself not understanding something about the interfaces and tools or terms used, please read chapters 1 through 3.

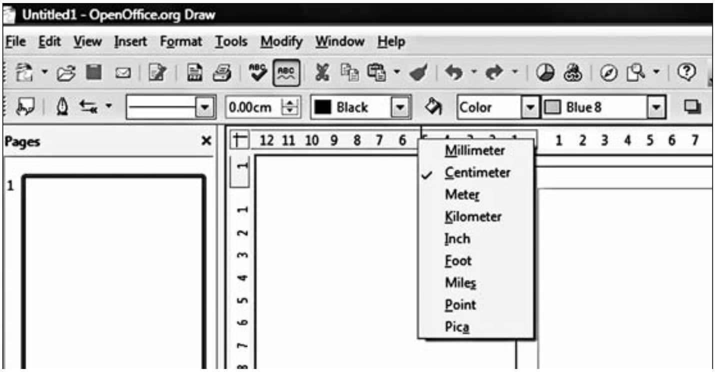
Start Draw, and you'll see the main window with toolbars. As usual, you can show and hide toolbars by selecting `View > Toolbars`. Also, you can add or remove buttons from toolbars by right-clicking on one and selecting the missing button or field. The toolbars you see by default are the Standard toolbar (common throughout OOo), the Line and Filling bar, and the Drawing bar. Other important toolbars that are not displayed by default are the Options and Color toolbars.



The main Draw window with its toolbars

Draw also displays rulers by default, so that you can use measurements when drawing your vectors. In order to change the units of measurement for the rulers, just right-click on a ruler and select the unit of measurement you desire.

Now let's move on to actually drawing shapes.



Changing ruler units

4.2 Basic Drawing

Using the Drawing toolbar—usually located at the bottom of the Draw window—you can draw basic shapes such as lines, boxes, and circles. In order to draw a line, just select the line tool and hold down the left mouse button, and drag your cursor between the points you want to join with the line. It's just as easy to draw ellipses and boxes.

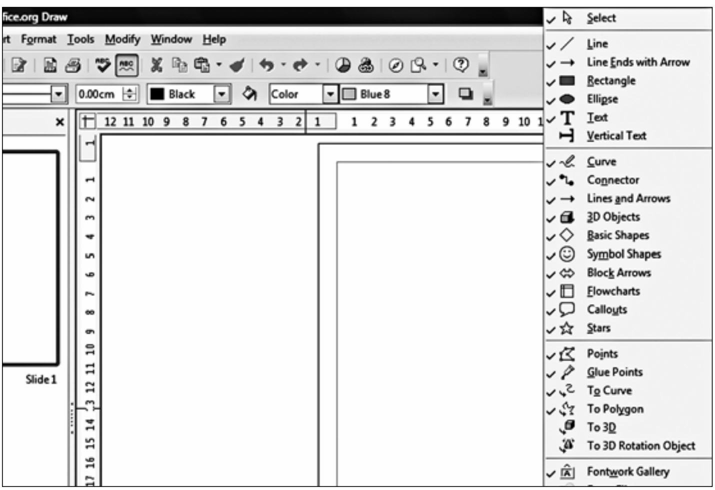
In order to draw a line that's vertical or horizontal, hold down `[Shift]` while drawing it—a little mouse skill is needed, however, because holding down `[Shift]` and dragging at, say, 40 degrees to an axis will draw a line at 45 degrees to it. Basically, holding down `[Shift]` draws lines at angles that are multiples of 45 degrees. Holding `[Shift]` down and drawing a box results in a square—and a circle when you use the ellipse tool.

If it is easier for you to draw starting from centre points rather than corners, hold down `[Alt]` and then drag the mouse—this results in a line, box, or ellipse being drawn from the centre out. If you hold down `[Ctrl]`, the shapes you draw snap to the gridlines. If you keep `[Ctrl]` pressed and click on one of the drawing tools, a default shape is placed on the drawing area. So if you want to create an ellipse, just hold `[Ctrl]` and click on the ellipse but-

ton, and an ellipse of default size and proportion is placed on the drawing board. You can resize it later.

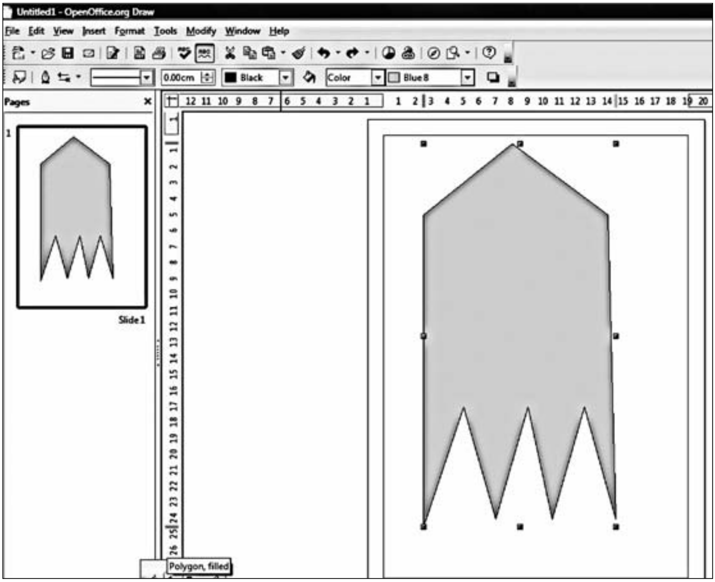
In order to add buttons to the drawing toolbar, just click on the right end of the toolbar (the part that has a little downward pointing arrow), go to Visible Buttons, and select the button you want on the toolbar. If you want to draw 3D shapes, you'll have to enable the 3D Objects button. Use the method we just described to enable the 3D palette.

In order to draw non-linear shapes, you use the Curves button. Clicking on it will show you a list of shapes you can draw—curves, polygons, and free form lines, either filled with a colour or not. We'll take the example of a filled polygon to draw, say, a star. Select the filled polygon tool from the Curves palette, start drawing your star by clicking once, moving to the next point, and clicking again. When you reach the end point (basically where you started from), double-click.



Enable the 3D Object button

Now that you know how to draw basic shapes, it's time to move on to more complex ones.



Drawing a non-linear shape

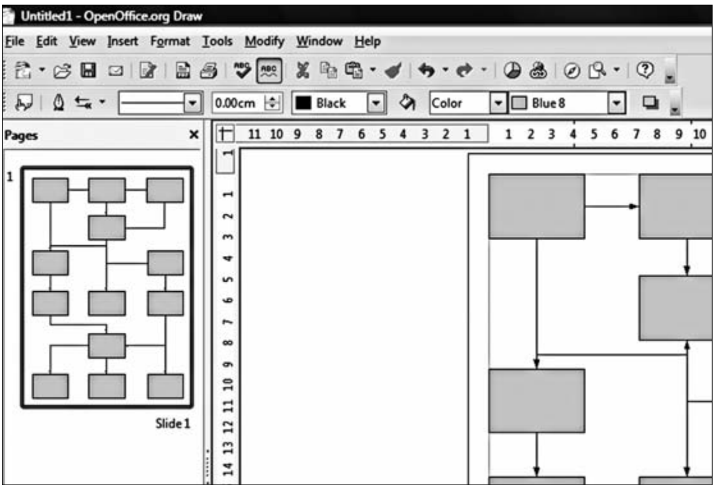
4.3 Connectors And Glue Points

When drawing a flowchart, or diagrams that need to connect to one another with lines, especially complex diagrams, using normal lines to connect boxes is not an option. If you need to move one of the boxes around, you'll have to realign all the lines. Instead of struggling like this, you can use Connector lines to connect your shapes.

All shapes you draw in OOo have default glue points in them and you can even add more. All the drag points in a shape act as glue points. First draw and position your shapes, then select the type of connector line you want using the connector button, then hold down the left mouse button over the first shape, then move your

mouse to the second shape to connect them, and release the mouse. Even if the connector is not going along the path you desire, place it and then drag it along the path you want.

If you want to change the position of gluepoints, or just add more, go to `View > Toolbars > Gluepoints`. Now you can use this tool and add new gluepoints to any shape. If the shape is a filled object, you can add gluepoints anywhere on the shape; if it's a normal outline shape, you can add gluepoints only on the shape's boundary.

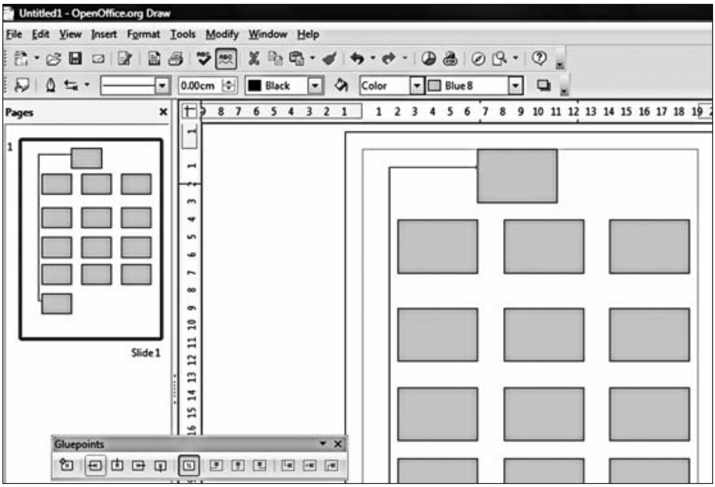


Connecting shapes using connectors

You'll also find four buttons on this toolbar that allow you to specify which direction the connector goes from the point it joins the shape. So if you want to add a connector on the left of a shape, but the shape you're connecting it to is on the right, you can set the connector to start moving left first from the point at which it connects to the shape.

4.4 Modifying Shapes

Using Draw you can create your own shapes by either drawing them from scratch, or by placing a shape and then modifying it. For example, although it's easy to choose a preset shape and draw a star, what do you do if all you want is a half-star?



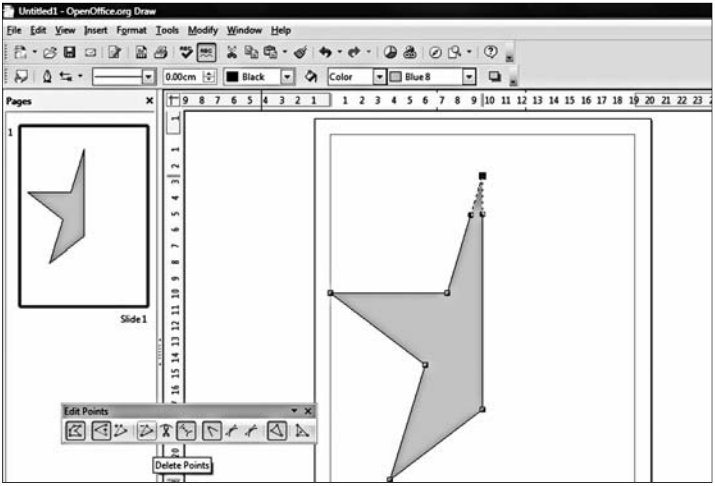
Connecting shapes using connectors

Thanks to Points, you can select and modify any object. You can add points, delete points and drag them about to modify the shape. In order to do this, you need to select the Points button on the Drawing toolbar. Select an object and press `[F8]` to see the Edit Points toolbar. You can use this toolbar to edit points, add points, and delete points. Just click on the Add Shape button and click on the shape's outline where you want to add a point. To delete a point, just select the point and click the Delete Point button or just press `[Delete]` on the keyboard.

4.4.1 Bezier Curves

Draw uses Bezier Curves to edit points with accuracy to give you the shape you want. This is used so you have the freedom to join two points by a curve instead of just a straight line, thus reducing

the number of points needed to draw your desired shape, and making sure that it doesn't look like a many-sided polygon instead of a curve.



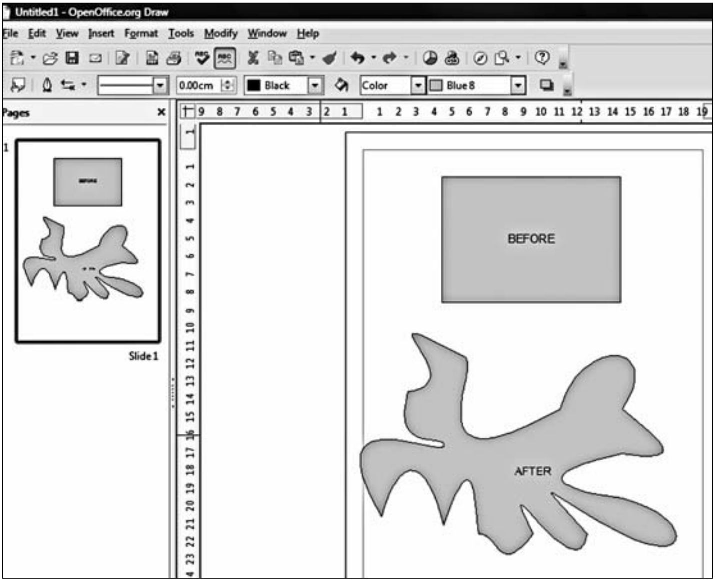
Making a half-star from a star shape by deleting points

Go to the right of the Drawing toolbar, click on the arrow that hides more buttons, select Visible Buttons, and select To Curve and To Polygon. This will enable the two buttons. Now, click on a shape after selecting the Points button and then click on To Curve, and select the point you want to curve. Every point has two handles that you can move in a circle around the point to curve the line that joins into that point. You can also drag the handles towards or away from the point in order to shorten or lengthen the curve. You'll need to try it to understand better, so go ahead and play with the settings to see what types of shapes you can get.

4.4.2 Multiple Shapes

In order to select multiple shapes, hold down `[Shift]` and click on the shapes you want to select. You can also use the select tool—the first tool on the Drawing toolbar—and then from an empty place on the page, hold down the left-click and drag your mouse

to form a selection rectangle. Any shape that is completely contained in this selection rectangle will be selected.



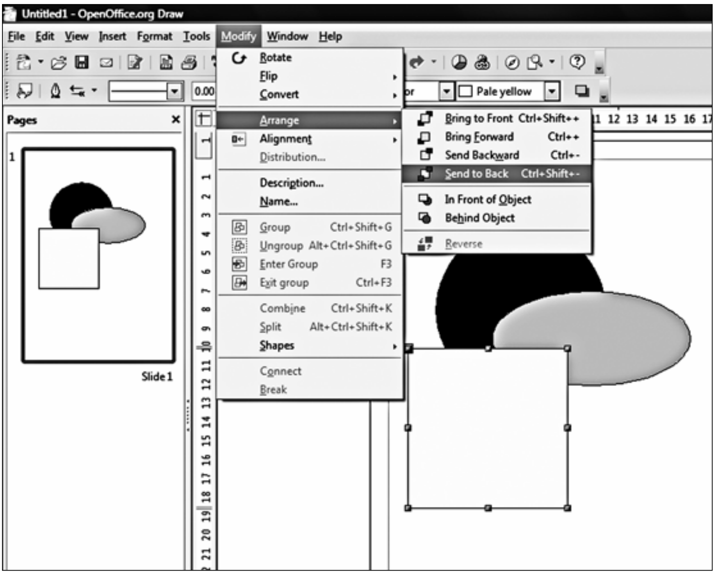
This was a rectangle before we Bezier-curved it

When working with multiple objects, you'll often find them overlapping, or may even want to overlap them on purpose. You can arrange the positions of the shapes by selecting them and then selecting `Modify > Arrange` and then choosing Bring Forward or Send Backward. This action should be self-explanatory, and you should have no troubles with front and back placements.

Rotating objects is also quite easy once you try it out. Click the Effects button and then rotate your object as desired. Remember that for 2D objects, once they're rotated they become the new shape, so trying to rotate it back to the way it was is not possible. 3D objects, however, can be rotated and brought back to the original shape only because they're treated as 3D shapes.

4.4.3 Arrows, Lines, And Fill

Using the Lines and Filling toolbar you can change the colours, thickness, and type of the lines you're using in your drawing, and also specify fills for shapes. By default, this toolbar is placed above the drawing area; if it's not visible, just go to View > Toolbars > Line and Filling. Apart from solid colours, you can also add gradients and even images as the fill texture or colour.

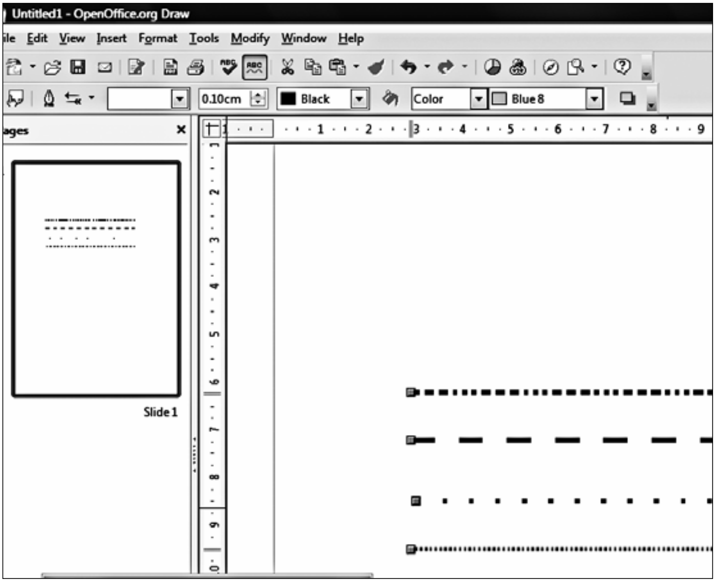


Sending a shape to the back

To convert plain lines into arrows, instead of drawing them again, just select the line and then click on the Arrow Style button on the Line and Filling toolbar. This will open the Arrowheads toolbar and you can choose which arrowhead you want to use as the style for your line.

You can also click on the second icon (called Line) on the Line and Filling toolbar (the one that looks like a pen) to open the Line dialog box. Here you'll see three tabs—Line, Line Styles, and Arrow

Styles. Using the options here, you can easily change any characteristic of a line.

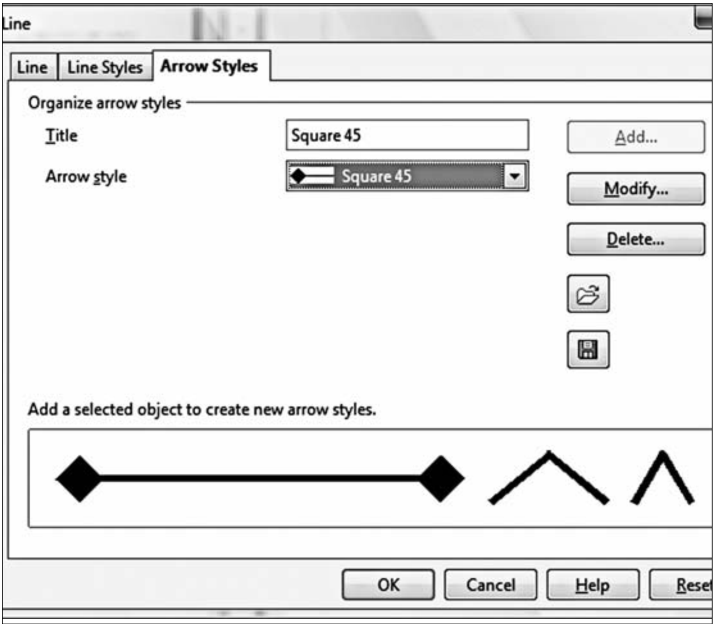


Using the Line and Filling toolbar to change line styles

4.5 Effects

What good is it to draw shapes if you can't make them look good? Using Draw, you can create special effects such as distorting the image, applying gradients, and more. To apply effects to a shape, click the arrow near the Effects button (it looks like a rotate button), choose the desired effects, and then apply it to your shape.

Now 3D shapes have other effects that apply only to them. When you create a 3D object, right-click on it and select 3D Effects. Here you'll find options to change the lighting, the material of the shape, and even shading options. You'll see five buttons at the top of the 3D Effects dialog box—Geometry, Shading, Illumination, Textures, and Material. Things in here are self-explanatory, and



Modifying arrow styles

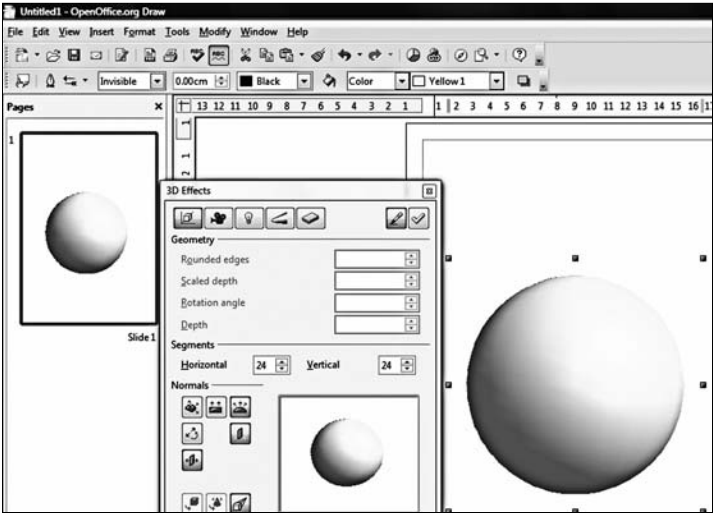
you can use the effects to see what they do. Just remember to keep the angle of illumination the same for all shapes if you want the drawing to look even remotely realistic.

If you have a 2D object, you can apply these same effects to it, but will have to convert it into a 3D object first. To do this, right-click on any shape and choose `Convert > To 3D`. Now you can go about applying all your 3D effects to it. You can also do the same thing by going to `Modify > Convert > To 3D`.

4.6 Joining Shapes

Let's say you want to draw spectacles. You can just import an image into draw, but the problem is that this will not be a scalable vector graphic. The only way you can "draw" spectacles is to do it

using shapes and then combining the graphical elements to form the final image.

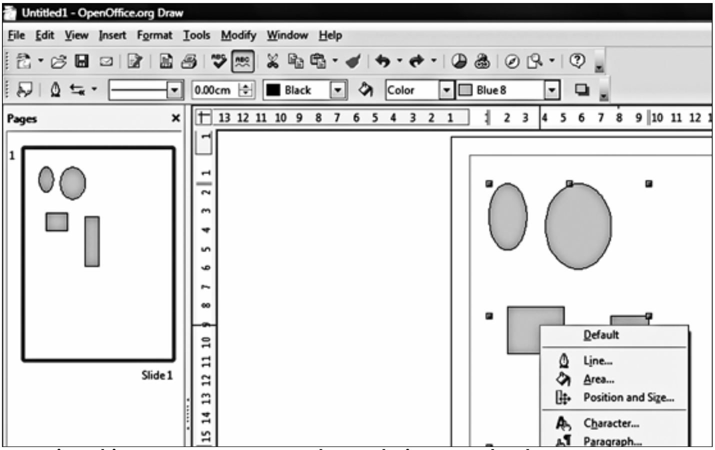


Applying 3D effects

To group objects, just select the shapes you want to group and then right-click and select Group. Now, when you move any one of the objects from a group, they all move because the handles are grouped as well. To un-group objects, just select a group and then right-click and click Ungroup. Like with most image editing / creation software, you can have a lot of groups within groups—this is what happens when you take an existing group, select a few more shapes and then group them together, forming a group within a group.

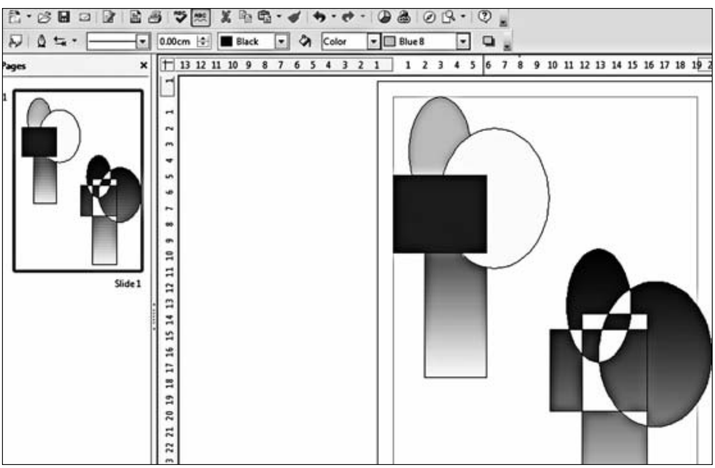
Combining objects is very different from grouping because combining two or more objects literally fuses them together so that a new object is formed and the old object's characteristics are lost.

To combine objects, just select two or more overlapping objects, right-click and select Combine. There are a few rules here that define what the final outcome will be. Let's say you have a red circle



Grouping objects so you can move them relative to each other

on top of a blue square, which in turn is partly resting on a green triangle. When you combine them you'll get a green shape as a result—this is because the characteristics of the "background" (furthest back) are taken into consideration. Another thing to remember is that the default combine will not fill the entire new object with green. Instead, where there are two shapes (or any even num-



The Combine option has some weird rules

ber) intersecting, you'll find blank space. Where there are three (or any odd number) of intersections, the background colour is filled.

Instead of combining shapes, you can choose to merge them. To do this, select the two shapes and right-click and then choose `Shapes > Merge`. What this does is cover the entire area of the two or more shapes with the fill properties of the background.

Congratulations—you now know enough about OpenOffice.org's Draw to start drawing without any assistance. Don't forget to read the help files.

Base

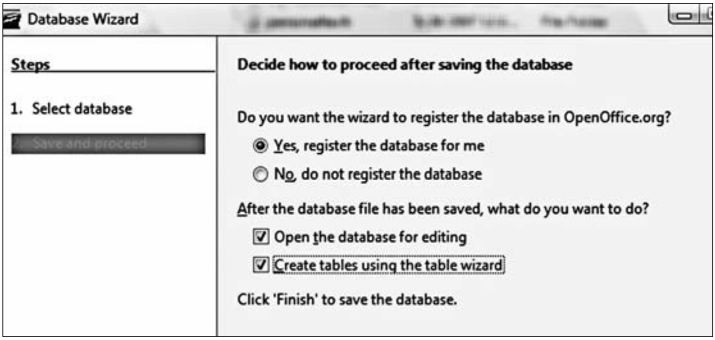
Base is OpenOffice.org's database application, and is similar to Microsoft Access. Every company has a database of some sorts—clients, inventory, sales, whatever... using OOo Base, you can tame your data and make it completely searchable and useful.

5.1 Creating A Database

Whether you're creating a database for the first time or taking existing data and transferring it into a database, you're going to have to create a new Base database. When you start up Base, you're greeted with a Wizard that will help you create your first database. Select the Create a new database radio button and click Next. If you have an existing database, you can select it by selecting the Open an existing database file radio button.

Use the Create Database wizard

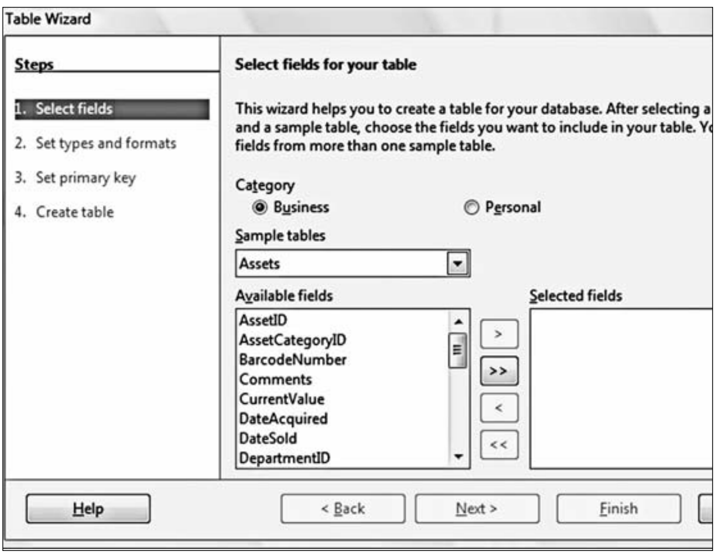
Once you click Next, you will be asked to specify what happens when you save the database. You can choose to not register the database with OpenOffice.org after saving it, but it's better to register it so it's available to all other OOo applications. You will also see checkboxes that give you the options Open the database for editing and Create tables using the table wizard. If you're going to be editing the database immediately, check these boxes; if not, uncheck them and click Finish.



Register the database with OOo

We'll assume you'll be editing the table immediately. If not, just open Base again and select Open an existing database file when you start and select the database.

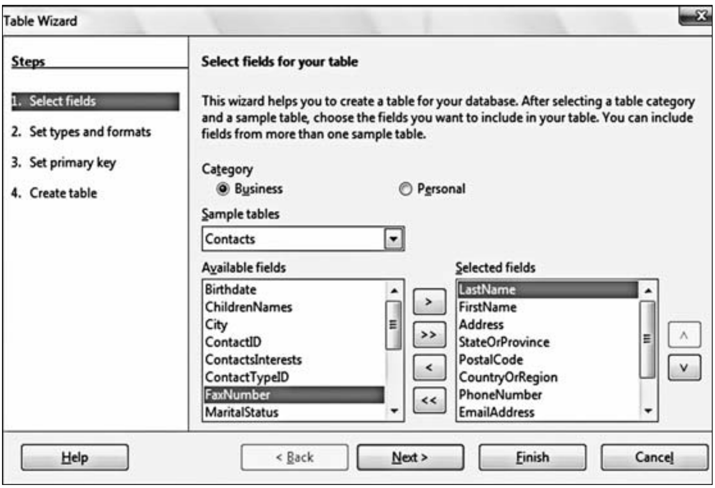
When you click Finish, you will be prompted for the database file name and the location to save it to. Add these details and click



Using the Table Wizard

OK. Your database will be saved. If you selected Create tables using the table wizard when saving, the Table Wizard will open.

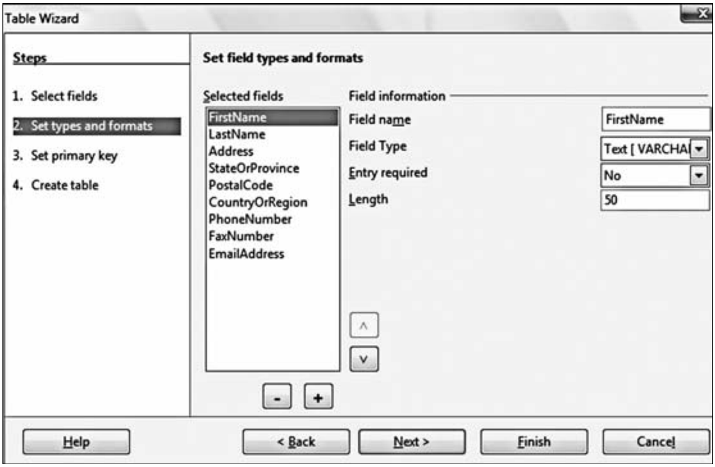
Choose a category—Business or Personal—and the sample table options change. For purposes of illustration, we're creating a database of contacts—names, numbers, addresses, e-mail IDs, etc. Depending on what your data is, you can choose a sample table that best suits your purpose, and then start adding fields from the Available fields list to the Selected fields list.



Selecting the fields for the table

Just click on a field and then click the ">" button to add it. The ">>" button will add all the fields to the Selected fields list. You can also sort the Selected fields list by using the up and down buttons to the right of the list; just select a field and move it up or down to get the order you want. When you're done, click Next, and you'll be able to change the field types and formats.

Most often, when using preset tables, the default field types and formats should work just fine. The only thing you may want to change is to increase the number of characters allowed for the

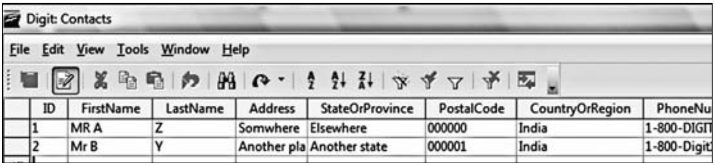


Changing field formats and parameters

different fields—we have some really long names and addresses here in India! Click Next to create your primary key. A primary key is what distinguishes one record in your database from another, you can just set Base to automatically create it for you—or you can choose your own. We prefer leaving such things to the software instead of risking messing up.

Creating your database table

Click Next, select the name for your database, and click Finish. Your database will now be opened as a table, and you can start entering data into the fields you created. Remember to save.

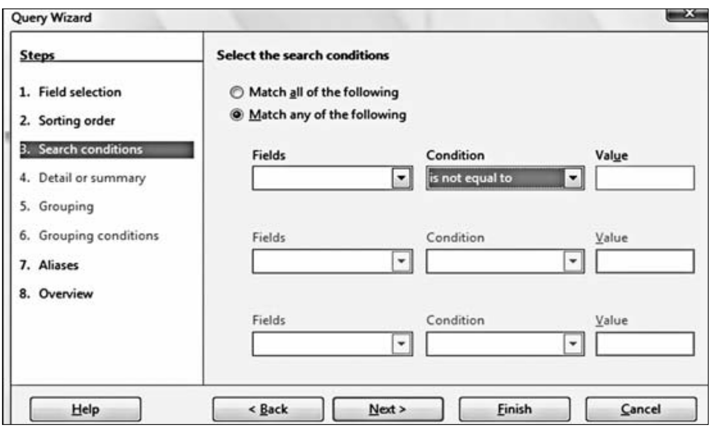


Entering data into your database using the table

5.2 Creating A Query

The whole point of using a database tool is the ability to query the database to find records that match your search.

To create a query, inside Base, click Queries in the Database panel on the left. You will see three options on the top pane: Create a Query in Design view..., Use Wizard to Create Query..., and Create Query in SQL View. Choose the Wizard if this is the first time you're using a database application.

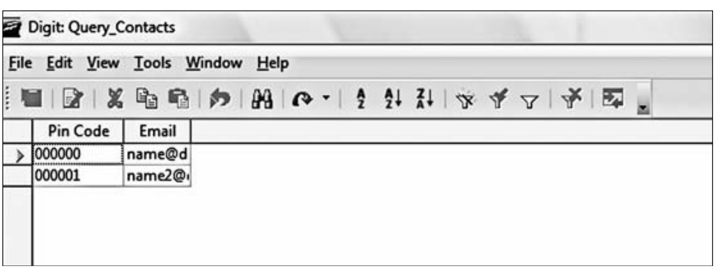


Creating a Query

In the Query Wizard, select the fields for your query—this is all logical, so, say, you want to search for all people named Mr A who live in India, or find the e-mail addresses of contacts in your address book from a given postal code area, you have to design your query to match your requirements. Let's take the second example—finding the e-mail addresses of people in the database who live in the same given PIN code area:

From the Available fields list, select PostalCode, click the add button (>), then select EmailAddress and click Add. Click Next and you can choose the sorting order. Sort by Contacts.PostalCode first, since that is the criterion that ties in the contacts in your database, and then select Contacts.EmailAddress in the Then by field. Choose whether you want to sort PostalCodes by ascending or descending order, and do the same for the e-mail addresses. If you want to further modify your search query, you can click Next, where you can add more search conditions. You can add fields, choose whether the search "is equal to", "is not equal to", "is smaller than", etc., and then set the value of the search. You can add up to three search conditions, and choose from the Match all the following and the Match any of the following search conditions.

Clicking Next will let you assign Aliases to your Search fields, in case the names are not already easily identifiable. Click Finish and your query will be displayed. You will see the query window with the results displayed. You have successfully created a database query.

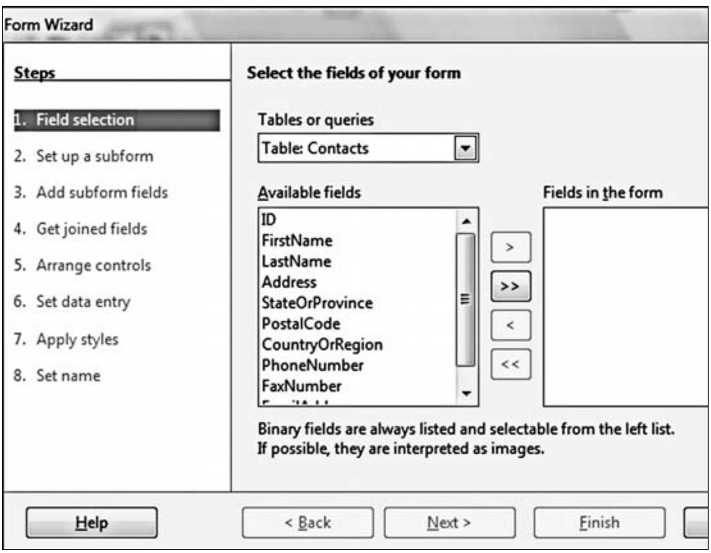


The results of the query we created

5.3 Forms

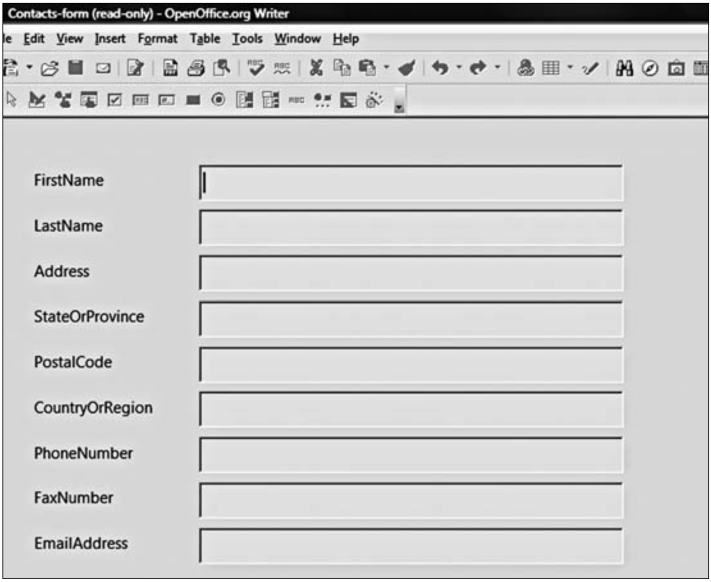
Forms are a different way of entering data—other than using the table view. Again, we'll use the Form Wizard to create a form.

Click on Forms in the Database pane on the left; you will see two options in the Task pane at the top. Select Use Wizard to Create Form..., and you will see the Form Wizard window. Select the fields you will be adding and then click Next—usually you can just add all the fields from the "Available fields" list to the "Fields in the form" list. Click Next and you can decide whether you want to add a sub-form. Again click Next to see how you can Arrange



Using the Form Wizard

Controls, or basically choose how the form will be displayed to you. Your choices are Columnar, Labels Left, Columnar, Labels on Top, As Data Sheet, and In Blocks—Labels Above. We're choosing the first option for this example.

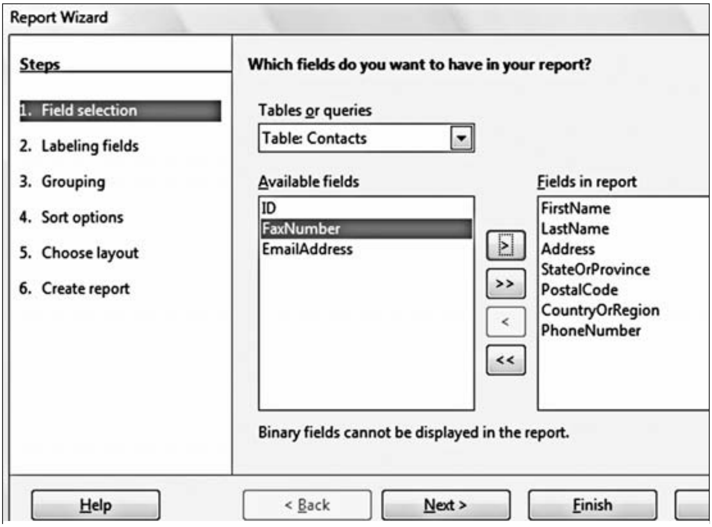


Adding data into the database using the form

When you click Next, you can choose whether you can use the form to only add new data, add / modify data, or even as a form that can only be used to modify existing data. Click Next once you've selected the appropriate option. Now you can set the way your form looks, choosing between No border, 3D look, and Flat. Click Next, supply a name for the form, and click Finish. You are now ready to start using the form to enter data into your database.

5.4 Generating Reports

You can generate reports based on your data. Just use the Report Wizard to do so. In the Database pane click on Reports, select the Use Wizard to Create Report... option from the Task Pane.

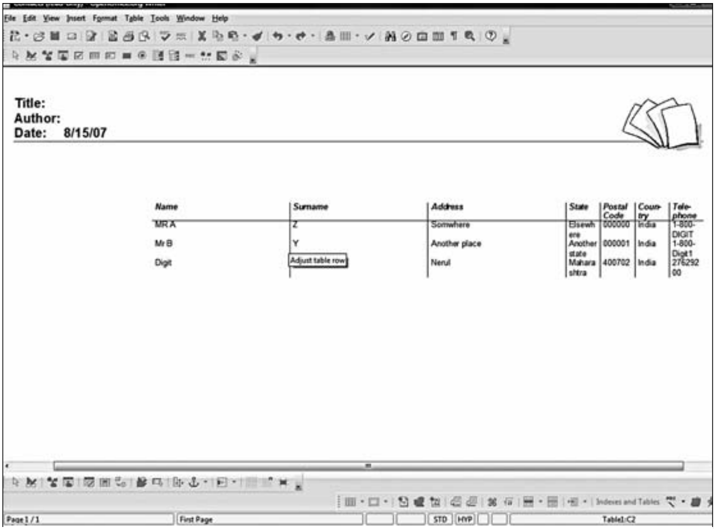


Using the Report Wizard

In the Report Wizard, choose the fields you want to display in the report. Click Next to add personalised labels to your data. Next, you select if you want any fields to be grouped. You can see the results previewed in the Report window in the background. Click Next and choose how you want your data sorted. We chose Postal Code so we could sort data by areas.

Click Next and you will see the options to choose your layout style for the report. Once you have given the report a name, click Finish, and the report will be created.

Using databases is very task-specific, and depends entirely on the type of data you are working with. This little introduc-



A successfully-created form

tion to OpenOffice.org's Base application will get you started using Base, but is in no way comprehensively indicative of the things you can do with a database application. Only once you start using it can you realise how Base can become invaluable.

The Mail Client

Mail is of critical importance to the modern connected office. In this chapter we explore two options. Option #1 looks at a traditional e-mail client, Thunderbird, a software you install on your PC. Option #2 looks at shifting your mail needs entirely to the Web. Each has its advantages and disadvantages.

If you use a software client like Thunderbird, you don't need bother about connectivity too much. Find a place to plug your PC or laptop into the Internet cloud, download all your mail, and disconnect if you can't stay connected. Take action on the mails you receive, type out your replies, connect to the Net, and fire away all those messages in one go—and you're done. This option is something that road warriors who lug their laptops wherever they go might prefer. You might also like this option if you don't care too much about having your mail messages reside with some third-party service.

The second option is to use your Gmail account. We'll show you some nifty tricks to map your regular official mail IDs to your Google account and use that for both sending and receiving without anyone being any the wiser that you are doing this from within Gmail. You could also sign up for the Google Apps service if you have your own domain name.

The biggest disadvantage with option two, though, is the need for a working Internet connection to get things done. As of this writing, this problem hasn't been solved yet. There are groups attacking the issue, and we'll take a peek under the covers to see what we can expect as e-mail evolves into a online/offline combo.

6.1 Mozilla Thunderbird

Thunderbird comes from the Mozilla Foundation, the creators of the runaway hit browser, Firefox. As is to be expected from such a team, Thunderbird is a free, open source, cross-platform (Windows, Linux, Mac), robust e-mail client that you can bend to do whatever you want—like making coffee (by writing your own extension and connecting it to a networked coffee machine)! While we will not delve into such esoteric uses, let's take a look at how you can get productive with Thunderbird.

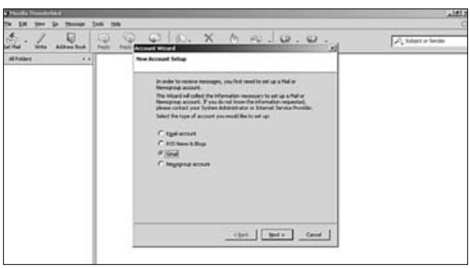
6.1.1. Downloading, Installing, And Configuring

Download the installer from **www.mozilla.com/en-US/thunderbird**. Once it's downloaded, simply run the file to install Thunderbird. You'll have the option to start it straightaway. The first time you launch it, it will ask you if it can import settings from other programs. Select Don't import anything and continue. The main Thunderbird window will open, and an account setup Wizard will take you through the steps of configuring your account. With version 2 of the software, you can set up a regular e-mail account, subscribe to RSS news feeds and blogs, connect to your Gmail Inbox, and configure your newsgroup account—all without any add-ons.

Give your e-mail wings!

6.1.2 Account Configuration Basics

You can use the Wizard to set up one account at a time. To set up your e-mail account, you need to know the incoming server (POP/IMAP) and outgoing server (SMTP) addresses of your e-mail service provider. This will usually be **pop.yourdomain.com** and **smtp.yourdomain.com**, or perhaps just **mail.yourdomain.com** for both POP and SMTP. Ask your service provider for the correct details if neither of these works. To set up Gmail, you only



Set up your e-mail, news feeds, and blog and news accounts

need to provide your Gmail user ID. Thunderbird will automatically configure the POP and SMTP server settings for your Gmail account.

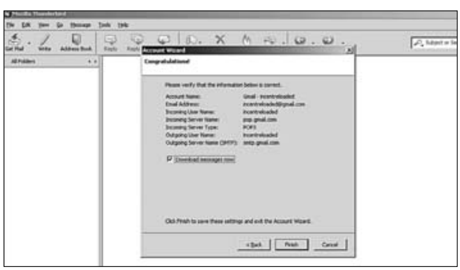
To set up your RSS news feed, you need to specify an account name. To connect to a news server, you need to specify the address of a news server which is serving news over the NNTP protocol. The news server is somewhat older technology which has been largely replaced by blogs, which are much easier to host and subscribe to.

For some e-mail accounts there might be a requirement for special security settings. In that case, your organisation should provide clear, simple instructions on how to configure Thunderbird with their security settings. If they don't, ask them! Thunderbird is an increasingly popular choice as an e-mail client and they should—generally speaking—provide configuration instructions and support for non standard settings.

6.1.3 Setting up your Gmail or regular e-mail account

GMail is especially noteworthy for providing free POP access to their users. That is, users can choose to download their e-mail to a client like Thunderbird and/or view it on the Web! The choice is entirely up to you.

The steps to configure a regular e-mail account are similar to configuring your Gmail account, and will require only one extra step—where you specify the POP and SMTP server names as explained above. Select the `Gmail` radio button and click `Next` in the Account Setup Wizard. Enter your name and Gmail username and click Next. That's it—you're done! As explained above, Thunderbird has auto-



Setting up your accounts in Thunderbird is a snap

matically filled in the incoming and outgoing server details for Gmail and all you need to do now is to select to download messages, and click `Finish`.


Specifying the password to download your Gmail

Thunderbird will then attempt to connect to your Gmail account and prompt you for your password. Enter it and (optionally) choose to save the password so you won't have to enter it again.


Enable downloading of POP mail from your Gmail account

Once this is done, you will need to do one more thing before you can download your Gmail messages to Thunderbird—log in to your Gmail account and explicitly enable POP download. This step is usually not necessary for your regular e-mail accounts, though in some cases organisations may have additional security settings which you will need to configure as explained above.


Success!

Log in to your Gmail account, click `Settings` (upper right corner), and select the `Forwarding and Pop` tab. In the POP download section, click the radio button that says `Enable POP`

for all mail, choose from the drop down in step 2, whether to retain, archive, or delete the copy in the Gmail inbox and click Save changes. Switch back to Thunderbird and hit the Get Mail button. Your Gmail Inbox in Thunderbird will begin to get populated, and you're ready to go!

6.1.4 Adding your Yahoo! account

Adding your Yahoo! e-mail account to Thunderbird is a bit more convoluted. If you have a @yahoo.co.in mail account, adding it to Thunderbird is simple. For some strange reason, Indian Yahoo mail IDs have free POP downloads, while the rest of the world have to pay Yahoo! for the privilege. This, of course, could change.

Set up POP access for yahoo.co.in mail IDs

First log in to your Yahoo! mail account and select Options > Mail Options at the upper right of your screen. Select POP & Forwarding and click Setup or Edit Pop & Forwarding. If you haven't migrated to the new Yahoo! Mail interface, select Options > Mail > POP Access and Forwarding.

In the "POP Access & Forwarding" window, select the Web & POP Access radio button and choose the "I want to receive all messages..." option, that is, download even the Spam messages landing in your Yahoo! mailbox. Later, we'll show you how to configure Thunderbird to automatically filter out spam. This way you can avoid losing any important e-mail which may be accidentally treated as spam by Yahoo's SpamGuard.

Now that you've enabled POP access, you can configure Thunderbird. To add your Yahoo.co.in account, open Thunderbird, and select Tools > Account Settings... to open the Account Settings window. Click Add Account to start the account setup Wizard.

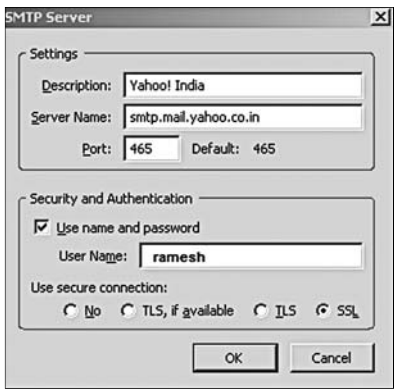
Follow the prompts and enter pop.yahoo.co.in for the Incoming Server field and complete the Wizard. Next, in the Account Settings window, scroll down to the bottom of the left pane and click on the Outgoing Server (SMTP) setting. In the right pane, click Add... In the SMTP Server window, enter this:

Set up POP access for yahoo.co.in mail IDs

Description: Yahoo! India
Server Name: smtp.mail.yahoo.co.in

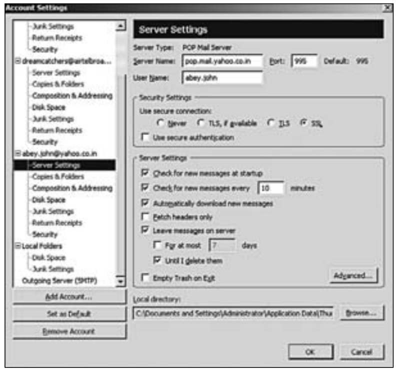
In the Security and Authentication section, select the `SSL` radio button. The port number will automatically change to 465. Ensure that the `Username and Password` checkbox is selected, enter the username, and click `OK`. You have now configured the outgoing server.

Next, click on Server Settings under your yahoo.co.in account name and select SSL in the security settings section. The port number will automatically change to 995. Finally, click on the account name and select Yahoo! India as your outgoing (SMTP) server. This will instruct Thunderbird to use Yahoo!'s outgoing server for all outgoing mail from the yahoo.co.in account.



Configure the outgoing mail server for Yahoo! India

It is generally advisable to use the SMTP server pegged to your email ID as ISPs may reject email where the domain names of the SMTP server and the e-mail id do not match. This is usually done as a security and/or spam filter precaution. For example, if your e-mail id is abc@yahoo.co.in and you use Gmail's SMTP server to send mail, there is a likelihood that some ISPs may reject your e-mail because of the mismatch between the SMTP server domain (gmail.com) and your mail ID domain (yahoo.co.in).



Configure the incoming mail server for Yahoo! India

Sending mail using the Yahoo! SMTP server

6.1.5 Using YPOPs for non-yahoo.co.in mail IDs

If your Yahoo account is not in the @yahoo.co.in domain, you will need to look at other options to configure Thunderbird. One popular option is to use YPOPs! (**ypopse-mail.com**).

Essentially, YPOPs acts a gateway server that pulls the mail from your Yahoo! mail account and hands it off to Thunderbird. Likewise, for sending mail, it acts as a local SMTP server. First download and install YPOPs! When it asks if it should automatically start with Windows, say Yes—but only if you have sufficient RAM. Once started, it will run in the background and appear as an icon in your System Tray. Next, open Thunderbird and start the Account Setup Wizard from `Tools > Account Settings`. Select

E-mail Account and click Next. Enter the name and e-mail address for the account (non-yahoo.co.in) and click Next.

Configure non-yahoo.co.in mail IDs with YPOPs!

Select POP and enter localhost in the Incoming server field. Clear the Global Inbox... checkbox if you don't want mail from all your accounts delivered to a single Inbox.

Set up the incoming server for YPOPs!

Click Next three times and then Finish. Scroll down to the Outgoing Server (SMTP) option in the left pane. Click Add and enter the details as follows:

Description: Yahoo!.com (substitute ".com" with your domain suffix—such as .co.uk; this will make it easy for identification when you want to manage or reconfigure your account later)
Server Name: 127.0.0.1
Username: (enter your username, or if you are facing problems with downloading / sending mail, then your full Yahoo! mail ID)

Make sure that the No radio button is selected in the Use Secure Connection section. Click OK.

Before you can start using YPOPs for outgoing mail you will need to tell Thunderbird to use YPOPs! SMTP for outgoing mail. In the main account settings window for the newly configured

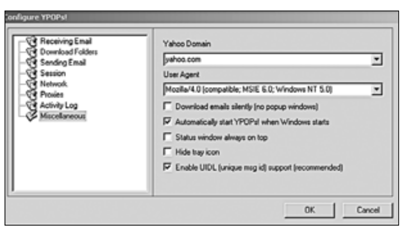
e-mail ID, select `Yahoo! .com 127.0.0.1` in the Outgoing Server (SMTP) field.

Configure the outgoing server for YPOPs!

Before you can start downloading mail to Thunderbird with YPOPs! you will need to do a couple of things. Right-click on the YPOPs! icon in the System Tray and select Configure. The YPOPs! configuration window will help you control many of the settings needed to download mail. At the minimum, ensure in the Miscellaneous section that the Yahoo! domain field matches your mail ID domain. For example, if your mail ID is **you@yahoo.co.uk**, then you would have to specify **yahoo.co.uk** as your Yahoo! domain. You can change other settings if needed, but at the beginning we advise you stick with the defaults till you get more familiar with the product. The current version of YPOPs! does not support the new Yahoo! Mail interface.

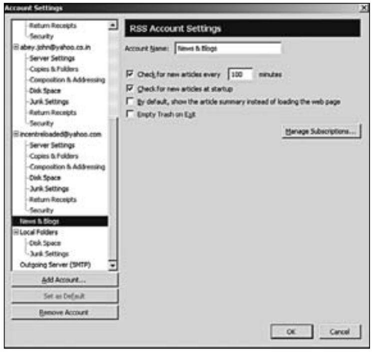
Configure Thunderbird to use YPOPs! for SMTP

A fix is in development, but until then, if you do face any problems downloading Yahoo! mail using the new interface, you will need to switch back to the old one.



Configure YPOPs! from the system tray

6.1.6 Configuring RSS



Configure the RSS settings in Thunderbird

RSS is the most popular way of gathering news and information and keeping in touch with all what your favourite bloggers and tech gurus have to say. To set up Thunderbird to be your RSS reader, go to `Tools > Account Settings... > Add Account`, select `RSS News & Blogs`, enter a name for the account, and click `Next` and `Finish`. That's it—your account is ready to start subscribing to feeds! (You can also click in the Account Settings window to configure various options for the RSS feeds.)

6.1.7 Using Thunderbird

6.1.7.1 The basics

You use an e-mail program to, at the very least, send and receive e-mail. And this, Thunderbird does very well. To send an e-mail, click `Write` or press [`Ctrl`] + [`N`] to open a new compose window. When you're done, hit `Send` or press [`Ctrl`] + [`Enter`]. Your message will be on its way. In between that quick and simple operation of sending mail, Thunderbird is doing some unobtrusive but powerful things to make your life easier.

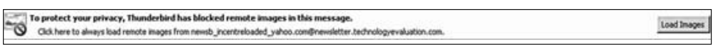
To get your work done faster, there are a host of shortcut keys. All commands with shortcut keys are clearly displayed to the right of the menu command; if you use some commands repeatedly, pay attention to the shortcut keys displayed and you'll suddenly find yourself working faster.

When you type in an e-mail address, Thunderbird will automatically save it in your Personal Address Book or Collected Addresses. This makes it easier the next time you want to send an

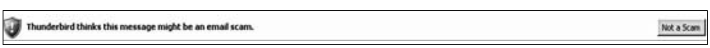
e-mail to the same person: you only need to type in the first few characters and Thunderbird will match the person's name, or if there are multiple options, it will show you a drop-down list of options to choose from. If you have multiple mailboxes, Thunderbird will also allow you to choose which mailbox ID you would like to use as your sender ID.

For messages you receive, Thunderbird will automatically tag those it thinks are spam, warn you about messages it thinks are scams, and will also block all remote images from addresses that are unknown or untrusted. All addresses not in your address book are basically considered untrustworthy.

You can either click `Load Images`, which will load images for that single e-mail, or add the sender address as trustworthy by clicking on `Click here to always load remote images from (sender_e-mail_id)`. When you do that, the sender's e-mail ID will be added to your address book, and all future e-mails from that sender will treated as "Safe." The security features that Thunderbird provides are an added layer of protection that helps safeguard against malicious hijacks. Here's the associated warning:

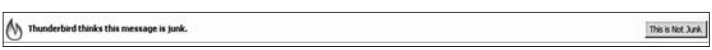


The blocked images warning in Thunderbird



The potential scam message warning

The above is to alert you to the possibility that there is a likelihood that the message is a scam. If you are certain about the sender's ID, click `Not a Scam`.



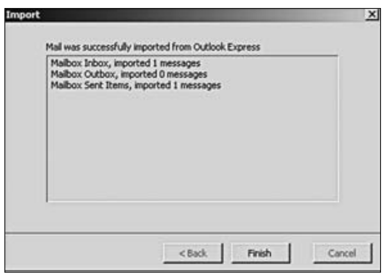
The potential spam message warning

Then, this above is to alert you to the possibility that the message is junk mail. Click `Not Junk` if you are sure about the sender.

Replying to a highlighted message means hitting [Ctrl] + [R] or pressing `Reply`. In addition to the standard command buttons, you can also use the `Tag` button option to create tags for your e-mail. There are five predefined tags you can use, or you can create your own. You can also create folders and sub-folders and move specific messages to those folders. To make it even more simple, you can use message filters to do these tasks automatically. See **Spam and Message Filters**—§6.1.7.3—to learn how to do that.

Importing mail from a different program into Thunderbird

Choose the program to import mails from



Messages have been imported successfully

6.1.7.2 Importing e-mail and contacts

If you were already using an e-mail program prior to Thunderbird, you can import the e-mail messages as well as the address book using the Import Wizard. We'll show you how to import mail, but the steps to follow for importing the address book and settings are pretty much similar. Click `Tools>Import...` to start the Import Wizard, choose `Mail`, and click `Next`.

Select the e-mail program you want to import from and click `Next`. In our example, we'll be using Outlook Express.

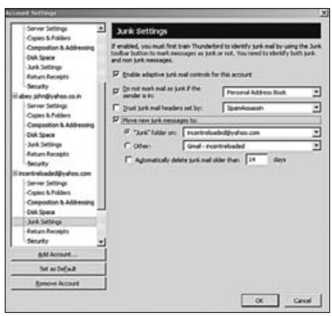
Thunderbird will import the messages from Outlook Express and inform you of the status of the import process when done. Click `Finish`. You can now see your imported e-mail in an "Outlook Express" sub-folder under the Local Folders section. Similarly, you can use the Import Wizard to import contacts and e-mail settings.

6.1.7.3 Spam and message filters

Filters are a powerful tool to help you filter junk mail and other messages into specific folders. Thunderbird has a highly advanced junk mail filtering system that learns as it goes, becoming more and more accurate.

First, you need to create a folder to trap your junk mail into. If you have multiple accounts, it is better if you create a Junk folder for each account, though there will be some overhead in managing these accounts. To set up your junk mail folder, click `Account Settings` and select your e-mail account. Click `Junk settings` and check the `Move new messages to:` box, and select the radio button option "Junk" folder on: <account_name>. Click OK.

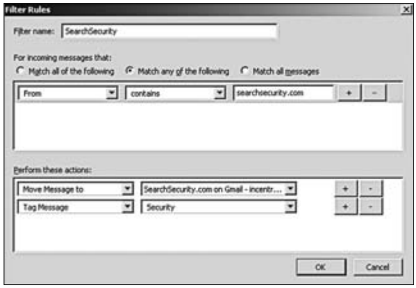
Next, select the Inbox for the account and click `Tools > Run Junk mail Controls on folder`. This will move all the messages marked as junk to the Junk mail folder. Also, all future junk suspects will be automatically moved to the Junk folder, making it easy for you to quickly review them before deciding whether you want to junk them permanently.



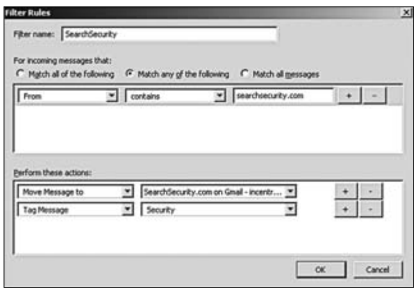
Configure Thunderbird for junk mail filtering

Other than automatically filtering junk, you can use the message filters option to configure Thunderbird to automatically perform actions on messages that meet specific criteria as they arrive

into the Inbox. This is a powerful option that will help you save time. For example, if you want to filter all your newsletters from **SearchSecurity.com** into a separate folder called "SearchSecurity.com" and also add a tag called "Security", this is what you would do: open the filter creation Wizard by choosing `Tools > Message Filters...` Click `New` to define a new filter rule. Give a name for the filter and specify that the filter should contain "searchsecurity.com" in the `From` field. Under `Perform these actions:`, specify that the message should be moved to the "SearchSecurity.com" folder and that the message should be tagged with the "Security" label. You will need to have created the folder and the Security label prior to running the filter Wizard. Once done, click `OK`. Highlight the filter rule in the Message Filters window and click `Run Now`. Thunderbird will scan the Inbox for all messages with the matching criteria and move it to the specified folder. You can create as many filters as you need and have them run in a specific order by using the `Move Up` and `Move Down` buttons in the Message Filters window. Note, however, that as the number of filters increases, there is also the potential of conflicts: you might have specified a filter rule that conflicts with another, existing rule. There is no easy way to resolve such conflicts other than to review each filter rule till you find what's causing the conflict.



Creating mail filter rules

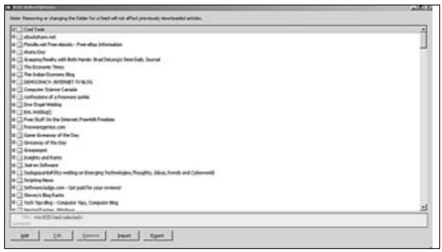


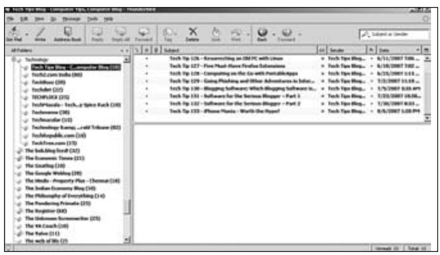
Process messages based on filter rules

6.1.7.4 Managing RSS subscriptions

To add subscriptions, click the `Manage Subscriptions` link, click `Add`, and enter the feed address of the site (or blog) you wish to subscribe to. If you want to add many sites at one go, you can import them in the XML format from your previous feed reader, provided, of course, that that RSS reader supports exporting in the XML format, or more specifically, OPML. If you have too many feeds that you subscribe to, you can create sub-folders to make it easier to group similar types of feeds together.


Add the URLs of your news feeds or blogs


Bulk import your RSS list from another reader in the XML format


Organise your feeds list using folders and sub-folders

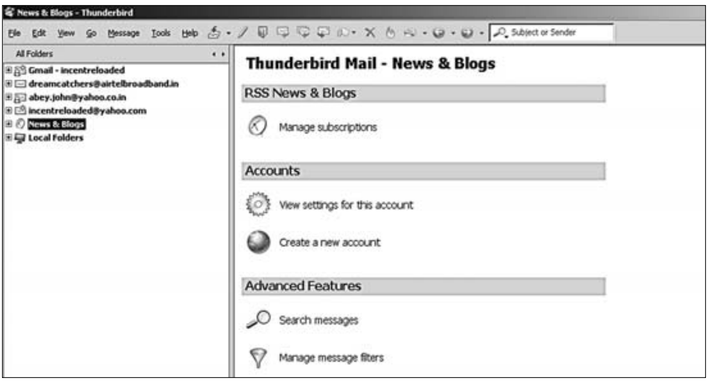
You can also create a separate account and group feeds by account. The option to use accounts or sub-folders is up to you, depending only on the visual style you are most comfortable interacting with.

6.1.8 Customising Thunderbird: Themes and Extensions

As with Firefox, Thunderbird has a customisable interface that you can rearrange and skin to your heart's content. For example, you can increase the screen area available to your message window by moving all the toolbar buttons and the search box to the menu

bar, using small icons, and removing the text accompanying the icons. Right-click on the toolbar, select `Customize`, and then drag all the menu icons and search box to the menu bar. Click `OK` and then go to `View > Toolbars > Mail Toolbars` to hide the now-empty mail toolbar. Your compacted Thunderbird user interface will look like this:

Re-arrange and customise the menu bar to your liking



The minimalist look for the power user

Visit the Thunderbird Themes site at **https://addons.mozilla.org/en-US/thunderbird/browse/type:2** for skin customisations you can apply right away. For example, if you are a Harley-Davidson fan, a nice skin is at **https://addons.mozilla.org/en-US/thunderbird/addon/4511**.

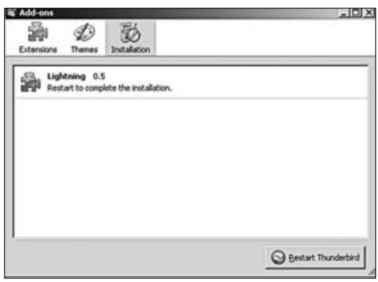
Harley-Davidson fans skin Thunderbird here!

As with Firefox, you can add extensions that will make you more productive or provide specific customisations that enhance the functionality of Thunderbird. The extensions site is **https://addons.mozilla.org/en-US/thunderbird/browse/type:1**. There are hundreds of extensions and the Extensions front page will provide you with some initial tips on what to look out for. For example, if you receive a lot of e-mails that have attachments, you can use the Attachment Extractor (**https://addons.mozilla.org/en-US/thunderbird/addon/556**): install the extension, select the messages with the attachments, and select `Extract Attachments`. No more opening each message and individually extracting each attachment.

Extract attachments from multiple messages in one pass!

6.1.9 Calendaring

If you are moving from Outlook to Thunderbird, one glaring deficiency you'll notice straightaway is the lack of calendaring and task management functionality. With the Lightning extension (**https://addons.mozilla.org/en-US/thunderbird/addon/2313**), you can get a fairly good calendar and task management system. Note, however, that since this is still a 0.5 version release, everything may not be exactly as desired. The Lightning extension is based on the Sunbird project (**www.mozilla.org/projects/calendar/ sunbird**), a standalone calendar application which you can use if you want to manage your calendar independent of e-mail. For our purposes, however, we will consider the Lightning extension. This way you can also have e-



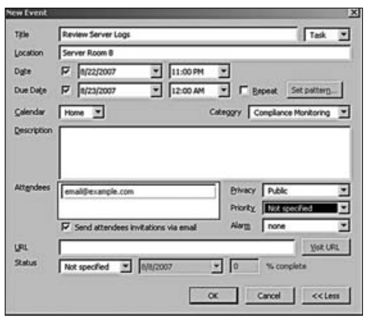
Install the Lightning extension to bring calendaring and task management functionality to Thunderbird

mail integration with your events and tasks similar to Outlook. Once the extension is downloaded, open Thunderbird, go to `Tools > Add-ons > Install...` and select the downloaded .xpi file for Lightning to be installed. Finally, restart Thunderbird. There will be a calendar in the bottom left pane with tabs for Agenda, To Do, and Calendars.

Calendar (Lightning) for Thunderbird

The Calendar opened in Month view

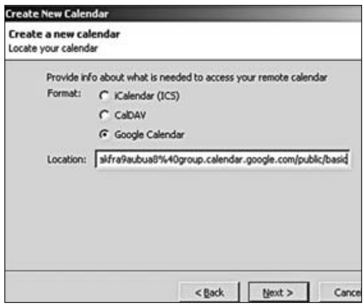
Clicking on a date will now open the calendar in its default view. Double-click your desired date and an Add Event window will open up which you can use to specify your event or task details. Click on the `More>>` button and it will expand to give you more options including inviting attendees via e-mail and setting priorities. If your mail recipient has a compatible calendar application, he can add your invitation to his calendar directly. You can have multiple calendars as you require. Lightning will by default will create a calendar called Home. You can create specific calendars that you share with others, and by using the Provider for Google Calendar extension (**https://addons.mozilla.org/en-US/thunderbird/addon/4631**), you can



Create events and tasks with ease

have bi-directional event and task creation that will show up in both your Thunderbird calendar and your Google Calendar, irrespective of where you create or edit it. Note, however, that you have to be online to view data for Google Calendar.

To access your Google Calendar or any public Google calendar for that matter, either edit the existing calendar or add a new calendar. We'll go with the option of adding a new calendar for now. Click `New`.



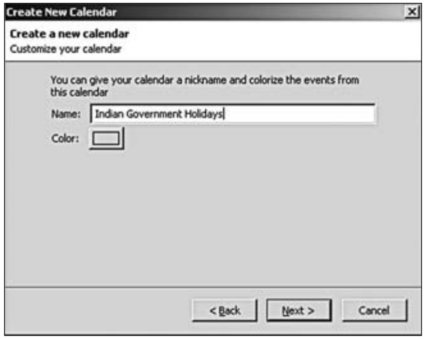
Specify the URL for Google Calendar

Get the URL details from your Google calendar settings

In the Create a New Calendar window, select `On The Network` and click `Next`. Select `Google Calendar` and specify the location of the XML feed for that specific Google calendar. To specify the location of the Google Calendar, log in to your Google Calendar account. Select `Settings > Calendars` and choose the desired calendar. Copy the link from the XML button and paste it into the `Location` field. Click `Next`, name the Calendar, and click `Next`. You will be prompted to provide a username and password; enter the login details for your

Gmail account and click `OK`, then `Finish`. Sit back and watch as your calendar begins to fill up with the details from your Google Calendar!

You can add many more calendars. Note, however, that currently Lightning does not support offline viewing of



Provide a name for the calendar

View Google Calendar events in Thunderbird's Lightning Calendar

calendar data from Google or any other calendar server. If you lose the Internet connection, your data will not be displayed any longer. However, any events you create in Thunderbird will be reflected in Google Calendar and vice versa.

6.2 Other Options

6.2.1 Using Gmail

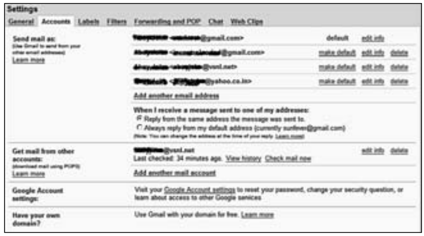
If you prefer to have direct online access, rather than install and configure software, Gmail can be a good central repository for all your e-mail IDs. If the e-mail provider supports mail forwarding or POP access, you can configure your mail accounts to be used directly from within Gmail without the recipients being any the wiser about the origins of the mail message. You can set up Gmail such that even your outgoing mail will carry your official ID.

To set up Gmail for all your IDs, log in to your Gmail account, click `Settings`, and select `Accounts`. The first option `Send E-mail As` allows you to send e-mail from your Gmail account using any of your other IDs. To enable this, Click `Add another e-mail address`, and in the pop-up window, enter your display name and the e-mail address you want to use. Google will send a verification message to that e-mail ID. Log in to there and click on the verification link. Once verified, you can use that mail ID as the sender ID from your Gmail account. By setting a different reply-to address, you can have the replies come back directly to your Gmail account rather than go back to the sending mail ID.

If you do not want to expose your personal IDs or Gmail IDs, and you have POP access to your mail account, you can use the `Get mail from other accounts:` option to configure POP access to your mailboxes. The steps are fairly straightforward, and are similar to what you would do with a Desktop client like Thunderbird. GMail will helpfully suggest that you create a label with the configured e-mail ID so that you can easily identify the mailbox.

If POP access is not supported and your e-mail provider supports e-mail forwarding, log in to that e-mail account and set it to forward all your messages to your Gmail account. Log in to Gmail create a filter based on the e-mail ID so that you can easily identify the forwarded mail.

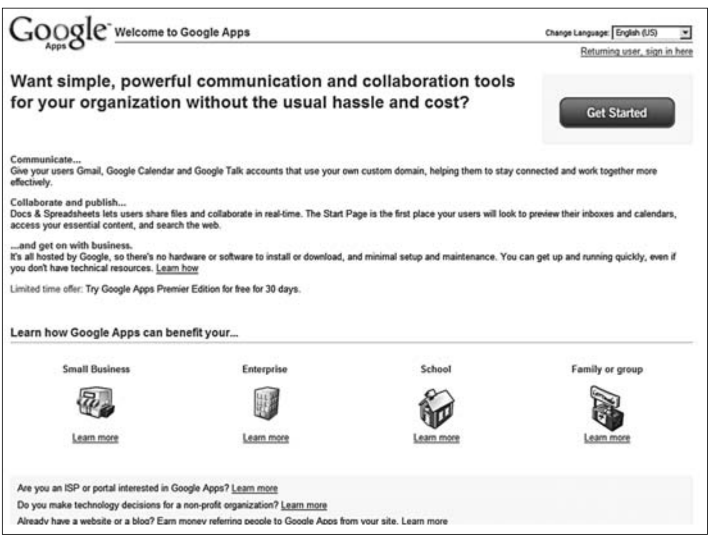
Now, you can safely use Gmail and still present a professional face to your customers, and business partners, and also use your personal Gmail ID(s) for keeping in touch with friends without having to log in to more than one e-mail application.



Consolidate all your mail IDs into your Gmail account

6.2.2 Using Google Apps

If you have a registered domain name and want to use that ID as your primary mail ID, Google Apps is a good choice. The Standard Edition gives you as much space as the free Gmail.com version, which is currently about 2.8 GB (though Google has only advertised 2 GB for the Standard Edition), unlimited user accounts, mobile access, plus access to Google Docs and all other Google services. The Standard Edition's primary attraction is that you can



Free e-mail hosting with Google Apps

have your own domain name hosted for free by Google and you can provide e-mail IDs to all your users without any hosting expense whatsoever. Having your own domain name costs about $10 (Rs 410 as of this writing) per year—or even less depending on the domain name and where you buy it.

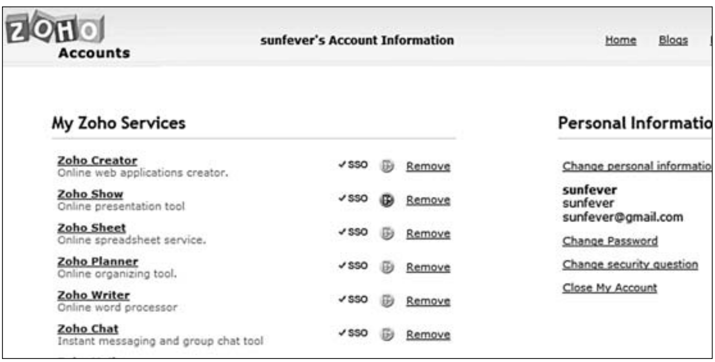
Just follow the instructions in the Getting Started and Signup process to configure your domain to use Google's e-mail services. Typically, this task should be carried out by a domain administrator. This is someone who has some understanding of how DNS works. However, the instructions are quite clear, and as long as you have access rights to customise the MX and CNAME records for your site, you should be able configure and set up your domain name to work with Google's services.

The Zoho Collaboration And Productivity Suite

If you've'nt heard of Zoho, then pull up your chair and grab a seat. Almost everything that a modern-day office needs is available under one roof at Zoho (http://zoho.com), and mostly for free. All you need to do is bring your PC / laptop and a broadband connection to plug into the party!

If you've a vague idea about Zoho ("some Google Docs clone...") then here's where you get boggle-eyed at the extent of their services covering office, personal, and business productivity, including free versions of Customer Relationship Management and Project Management software. And oh, not to make too fine a point of it—did you know Zoho is an Indian company?

All of Zoho's services are accessible from **http://zoho.com**. Of the 16 services currently offered, 10 can be accessed with a single username and password. For reasons not very clear, the other sites require a separate sign-up, though we're assuming that at some time in the future you would have single-window sign-on for the entire Zoho family. There is a nice accounts management page (**http://accounts.zoho.com**) that shows you at a glance all the services that are part of your Single Sign On (SSO) profile and the ones where you are currently logged in.



Centralised access control to all your Zoho Services

7.1 The Office Suite

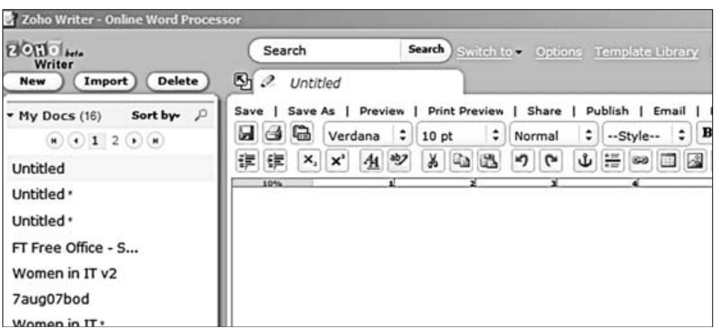
Here are your drop-in replacements for MS Word, Excel, and PowerPoint. Nothing to download or install—just type in the URL and watch everything you need load up in your browser. In comparison to Google Docs and Spreadsheets, Zoho Writer and Sheet are almost exactly the same. A plus with Zoho is their presentation

software Zoho Show; Google is still scrambling to release a similar service. A negative with Zoho is the file management interface. You need to log in to each individual service separately to access the files, which in Google Docs can be done through a single window. This small drawback though, in our opinion, is a small price to pay for an integrated services suite that extends beyond just word processing, spreadsheets and presentations. Besides, the online "software-as-a-service" world is pretty much in perpetual beta, so we're betting some sort of unified file management interface will eventually overlay the individual Zoho services. A likely candidate could be Zoho Mail (Zoho Virtual Office)—see §2.4 for more details, but that is still in private beta and currently doesn't support integration with documents stored in Writer, Sheet, and Show.

7.1.1 Zoho Writer

There are three ways you can work with Zoho Writer: by visiting the URL (**http://writer.zoho.com**) in your browser; by installing an MS Office plugin that allows you to work on your documents and spreadsheets from within MS Word and MS Excel itself and then save your changes to Zoho; by installing the Desktopize Widget that installs a Web client for Writer, Sheet, and Show on your Desktop.

In terms of usability, we found the Desktopize Widget the easiest to work with—it launches a full screen instead of the Writer interface, allowing you to just focus on getting on with your work.



Bury your distractions with the Desktopize Widget

The look and feel is that of working on a Desktop application, and only the persistent lag of responses over the Net gives any indication that the software is actually being delivered over the Web.

Most of the features you would expect from a Desktop office productivity suite like MS Word or Open Office Writer is available in Zoho Writer. However, for heavily-formatted documents, it is better to rely on one primary application, as formatting tends to get skewed when you move documents between formats. This problem, while not peculiar to Zoho, will also surface when you work with documents using the MS Word plugin. Ideally, for presentation-grade documents that you wish to distribute to a formal audience, you should start and finish your work from within Zoho Writer itself. This caveat is applicable to Zoho Sheets and Show as well.

You can make your documents public, share them via e-mail, publish them to your blog, or include them in a "Doc Roll" on your Web site or blog. The Doc Roll is similar to the Blog Roll that you would include on your blog. Documents that are made public are not editable, but you can permit visitors to post comments. A specific URL will be given that can be accessed by anyone.
Shared documents can, however, only be viewed by those you invite. If they have a Zoho account, and you've given them permission, they will be able to edit the documents. If they don't have a Zoho account, they will only be able to view the documents, and will need to sign up to be able to edit them. You can also start a chat session (using Zoho Chat) right within the same window to discuss the document with those who you've invited to share it.

Also, you can tag the documents with specific labels, which can be useful for sorting and retrieval later. One useful feature is the automatic versioning of documents, which enables you to roll back and compare various versions of the document that have been saved over a period of time. Thus, you can compare between two different versions and revert to an earlier version if required. A link that enables you to e-mail the document to your colleagues

and business partners—if you wish to incorporate their digital signatures—is also provided. This feature will be useful when you are collaborating and working on a legal or contractual document.

You can import documents of the following formats: HTML, .doc, .sxw (OpenOffice.org) , .odt, .rtf, and text. You can also import images in these formats: JPEG, GIF, PNG, and text files. Zoho supports document imports both from your PC as well as a specified URL. When importing from a URL it can be a bit picky, and it won't import the document if you don't start the URL with the "http://" prefix. You can give it a specific document name or accept the name Zoho suggests. Like with Google Docs, you can also e-mail HTML and .doc documents into Zoho at a unique e-mail address for your account. Click the Import button to get a quick view of this e-mail ID. However, note that Zoho does not currently support the Office 2007 formats.

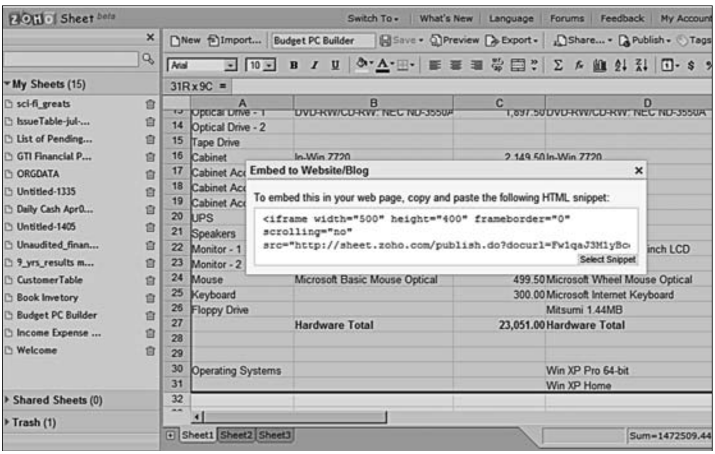
After having worked on Desktop suites, most of the command buttons icons will be familiar, and in any case, descriptive tool-tips pop up when you hover over the buttons. Almost all the usual shortcut keys will work, including `[Ctrl] + [S]` for saving a document. There is a small learning curve in identifying the layout of the buttons as most may not be exactly where you expect it to be. Once you've familiarised yourself with the interface, working with Zoho Writer is a breeze. You'll miss some of the advanced features in MS Word you've gotten addicted to, but in most cases your needs can be met with the functionality provided by Zoho Writer at an unbeatable price (Free!).

7.1.2 Zoho Sheet

Very similar with respect to the generic collaboration features and functionality found in Zoho Writer is Zoho Sheet. As a basic spreadsheet, Zoho Sheet is a powerful tool in its own right, but you'll need to get over the desire to have Excel-like ease of use. Remember, these are still the early days of Web-based applications, so some amount of functionality will be missing—but you've all the basics in place to get productive right away.

You can import Excel (.xls), Open Document (.ods), Open Office (.sxc), and even Comma Separated Value (.csv) files. However, unlike in Writer, you cannot, as yet, e-mail your spreadsheets into Sheet. This puts it on par with Google Spreadsheets, which also does not support mailing your spreadsheets in.

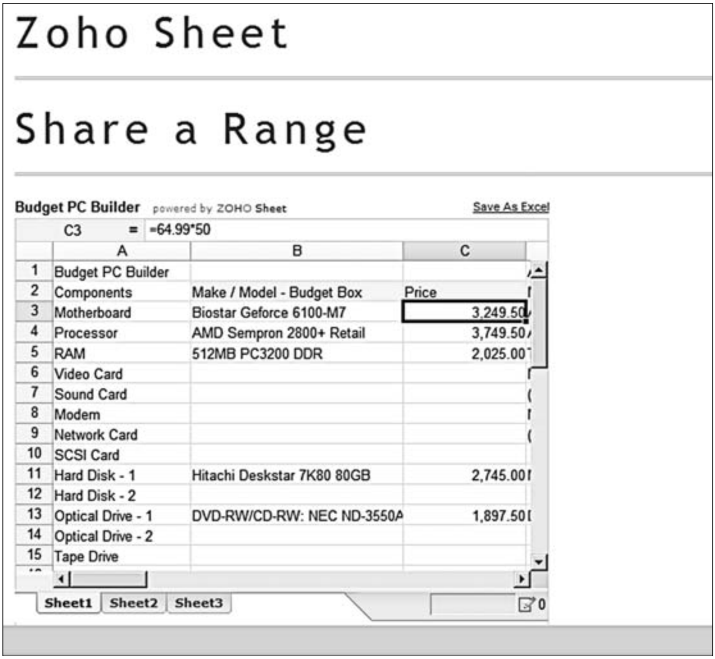
Complex functionality like PivotTables are also not supported, though you will be able to view the raw data you've created with the Pivot. This can be useful when you want to publish the results on your Web page where you can embed a range of cells, which you can then allow your site visitors to interact with and play around as they wish.



You can select a section of your spreadsheet for publishing on your Web page

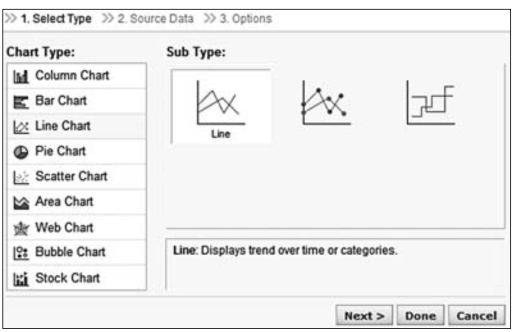
A useful feature is the Save As Excel option on the published Web page, which enables your site users to save their custom changes as an Excel sheet on their local disks. Note, however, that if you refresh the page, the data will revert to what was originally published.

While you can copy and paste data from a spreadsheet directly into a blank Zoho Sheet, be aware that none of the formulas you created in the sheet will be copied. If you want to preserve the formulas, a better option is to upload it.



A Web page embedded with interactive data from Zoho Sheet

Also, graphs cannot get imported as far as we could see; however, there is a snazzy tool for creating graphs from within the application itself. Again, not very easy to use at first but once you spend some time familiarising yourself with the functionality, you should be able to get out the graphs as you like.

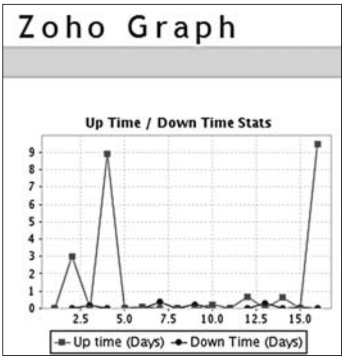


You can create charts for your Web page

What's cool about this tool is that you can

keep updating the data in your Zoho Sheet and the graph will get automatically updated with the changes. Not only will data get updated, you can even go about changing the chart type itself without having to republish the chart URL.

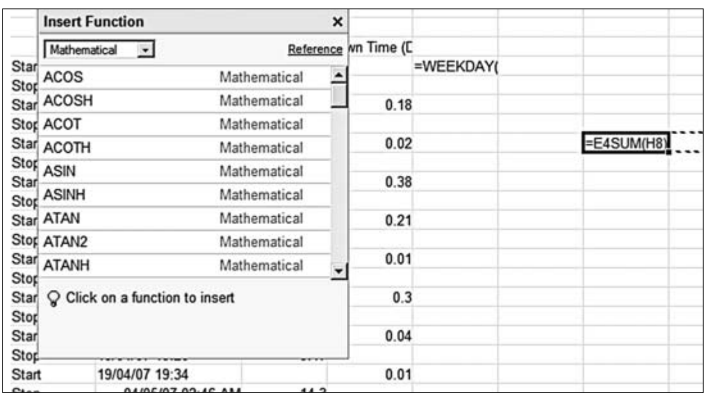
You can also connect to an external data provider like the stock exchange and populate your sheet with relevant data as required. Finally, if you are a big fan of functions and formulas, Sheet has more than enough to keep you occupied. Zoho has a impressive list covering the most common subject areas from Math, Date / Time, Logical to Financial, Engineering, Stock (market), and more.



You can also embed dynamic charts into your Web site

7.1.3 Zoho Show

Here's a basic presentation tool that is sufficient for simple presentations you want to share over the Web. There are the usual collaboration options for:



Create complex formulas to manipulate your data

❍ Sharing your presentation with an invite only list of users
❍ Making it public with a URL that you can distribute to your contacts or make available for the world at large in a public directory; and/or
❍ Embedding it as a gadget in a Web page that visitors can run through when they visit.

In addition to these regular options, you also have the Remote Control option with which you can hold a live presentation-cast to a specific list of invitees. Using this feature, invitees log in to a Web address you e-mailed to them. At the agreed time, you start the presentation and the audience follow it on their screens, watching the screens change in response to your clicks. The presenter will be able to see all the participants who have provided their names and logged in; however, we were not able to observe any way in which the audience could interact with the presenter from within Zoho Show itself. We presume this would have to be done external to the application, using perhaps Zoho Chat for text conversations and something like Skype's conference call feature for voice interaction.

Hold presentations for a global audience using Zoho Show

As a presentation tool, Zoho Show is still in its early days. You can import your PowerPoint (.ppt, .pps) and Open Office (.odp, .sxi) files into Show, though there may be some loss of fidelity. There is a basic set of shapes, arrows, and symbols, but no 3D shapes, no connectors, or the ability to embed text within the shapes itself. You can't do much with the shapes either, other than simple manipulations like Bring to Front and Send to Back. Also missing are slide transitions, animations, and the support for embedding audio and video.

However, if we were to be brutally honest with ourselves, you would agree that all that eye-candy are distractions to getting the content out the door. As a stripped-down-ready-to-go presentation delivery software, Zoho Show will do the job well. You have an appropriate selection of shapes, backgrounds, fonts, and colours to decorate your presentation, along with the ability to add pictures and embed Web URLs (say for graphs and spreadsheet ranges from Zoho Sheet?). Even with such a frugal, commonsensical outlook to justify using Show, you will still feel that twinge for more features to give your presentation some zip and zap. This, we hope, will start appearing in upcoming releases.

7.2 Collaboration

Collaborations is the direction in which the online world is evolving—and Zoho is right there, smack-dab in the thick of it. If you work as a team, whether as part of a single organisation or as a group of loosely affiliated peers, Zoho's collaboration tools—Meeting, Wiki, and Chat—can help you coordinate and collaborate on your project with ease.

7.2.1 Zoho Meeting

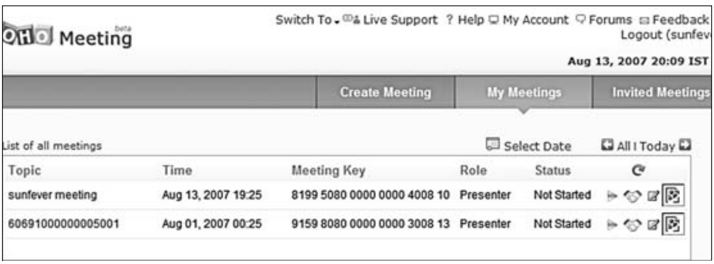
Zoho Meeting allows you to show and share your Desktop online with a list of people you've invited for a specific date and time. You can also embed it in Zoho Show, Zoho Notebook (see §7.2.2 below), or any public page, and have meeting participants join the meeting once the presenter (you) has started it. Each meeting has a meeting key which anonymous participants will have to enter to join the meeting, or they can simply click on the link in the e-mail.

To begin a meeting, the organiser will specify a date and time and send an e-mail invite to all the participants. (Zoho Meeting is currently in beta, and you can organise an unlimited number of participants and meetings). Zoho Meeting also gives you the option to use voice chat conference using Skype by allowing presenters to share their Skype IDs with participants. Invitees can then click on the link in the e-mail and join the meeting at the appropriate time.

A meeting presenter can review his list of meetings and simply click on the green Play icon to start the relevant meeting.

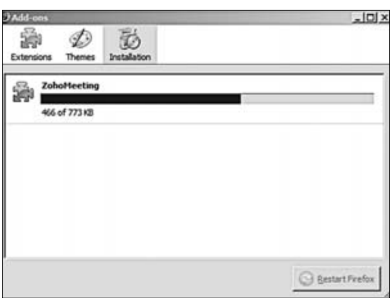
On the presenter's side, a small agent program will download. This will enable him to decide whether or not to allow Desktop sharing, and at the same time will allow him to chat with participants.

On the participants' side, they either click on the link to be taken to the meeting's start page, or go to the Zoho Meeting home page and enter the meeting key if he has obtained the key by any other means—say an embedded link on a blog or a Web page. Once the meeting status shows that the meeting as started, participants



Managing your online meetings

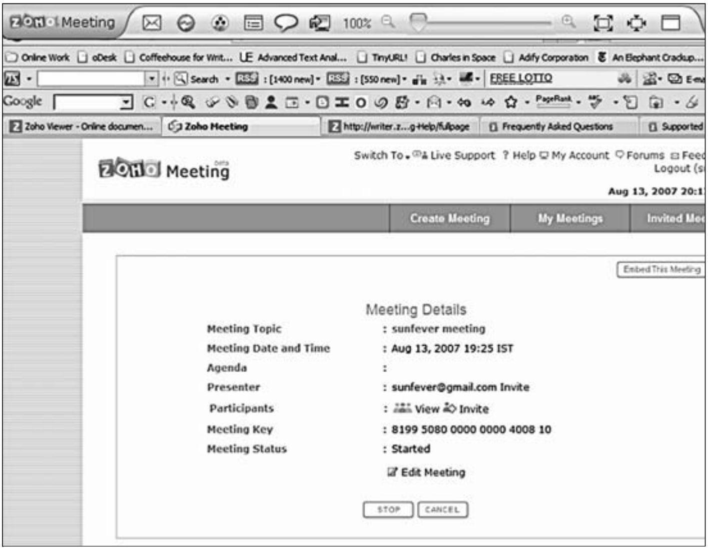
can join by entering their names or e-mail IDs. An ActiveX, Java, or Flash viewer will need to be downloaded to view the shared Desktop of the presenter.



The Zoho Meeting installer

Depending on the controls specified by the presenter, the participants will now be able to view the presenter's desktop, be able to take control or request for control of the presenter's Desktop. In the meeting, text chat can be held with all the participants, which can also be

substituted for live voice chat using the Skype voice conferencing feature.



A shared Desktop being viewed by a participant

Zoho Meeting in its current format is an excellent tool for software companies who wish to showcase or demo their software products to a geographically-dispersed customer base.

One repeated problem we've had with Zoho is the lack of contact integration, that is, we've had to manually flip back and forth between our contacts list in, say, MS Outlook or Gmail, before we were able to get at all the contacts we wanted to e-mail with the meeting details. In these days of social networking, a sorely missed feature is the ability to import contacts from your primary mail application.

Others may find some value in it for scheduling and participant tracking, but will need to use other tools like the remote sharing feature of Zoho Show and Skype for audio conferencing. One nice

Sharing one's Desktop and chat with participants

touch is the automatic archiving of the chat text transcripts during the meeting into Zoho Chat (see §7.3 below). This can be useful when you want to review the contents of the text conversation with the participants and analyse and prepare an action plan in response to the conversation.

Wish list: these, however, we feel, barely scratch the surface of what could be done with a meeting management and scheduling tool. For wider appeal to an audience of SoHo and enterprise-grade businesses, Zoho Meeting could also have supported some flavour of audio / video chat along with the ability to record and archive both in meetings activities and conversation transcripts, be it via audio, video, or text. This would have created an online, searchable repository of knowledge for colleagues and peers who were not able to attend the meeting.

7.2.2 Zoho Wiki

A wiki is easy to set up, easy to add to, easy to edit, easy to change. Its main focus is the creation of content around a specific topic. Wikipedia, the free encyclopaedia, is one of the most popular and post powerful examples of how a wiki can be put to use. It is as useful to an organisation as it is to individuals. An organisation may use the wiki to create an employee manual that can be accessed by all and updated by a few. Another wiki may exist to list weekend community activities that anyone can create, edit, or change. Yet

another wiki may exist to discuss the latest trends in the market place. Individuals or groups of like-minded people can also use wikis to create an online knowledge repository revolving around things of interest to them.

Zoho Wiki is an easy-to-use wiki that provides all the basic features of a typical wiki. You can get started right away with creating your content without having to worry about knowing any HTML or special syntax, unlike in some wiki software. A straightforward WYSIWYG (What You See Is What You Get) editor enables you to start typing and formatting your text the way you like it. Almost all the command buttons available with Zoho Writer are available for formatting and editing text, including insertion of tables, pictures, links, and anchors.

Once you're done, all you need to do is hit Save and then publish your post. All the pages are available under an RSS feed for the site or as RSS feeds for individual pages. You can subscribe to either. The requirement for subscribing to an RSS feed of a single page may occur when you've content that gets updated very often.

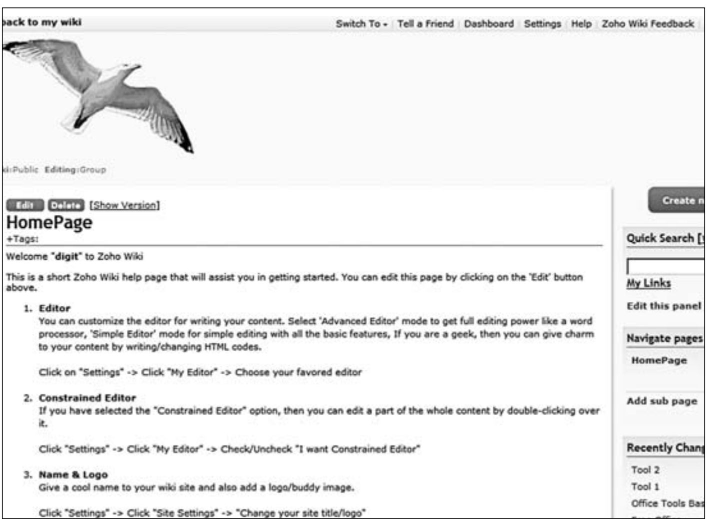
Zoho Wiki's layout is clean; the buttons are clearly labelled. Each wiki you create gets its own dashboard, which will give you a quick overview of the current activity on the wiki from recent changes to pages, newly-added pages, and the latest comments. You can quickly add a page, add sub-pages, and further sub pages (sub-sub-pages) depending on the hierarchical layout you choose for your content.

Then, you can specify who can read, edit, or comment on the pages, and give editing rights to groups of specific individuals or to everyone. One drawback here is that permissions are global. Those who have rights to edit pages can do so for all pages. As of now, there is no feature where you can control permissions for a specific page. Even though this opens a door for potential abuse, the version control feature gives you some measure of control. It allows you to roll back the page to an earlier version should any-

one with editing rights vandalise the page. The version control feature is also useful in comparing the differences between two versions. In addition, you can use the notifications features in the wiki settings to keep you updated on the changes when others create or change pages.

A site map page shows the current layout of the wiki's hierarchy of pages. The site map page also supports drag and drop reordering of the pages in the site hierarchy. This can be useful when you want to rearrange pages. In addition to the site map, there is an index that gives you a alphabetical listing of all pages. An "incoming links" section points all the pages that link to the current page, giving you access to related information on each topic.

You can't do much by way of customisation; however, you can add your own logo or choose from a selection of skins that control the colour scheme of the site. For power users, this lack of customisation control may be somewhat frustrating. However, for non-tech-savvy users who do not wish to be burdened by too many



Quick, easy, simple wiki creation and management is possible with Zoho wiki

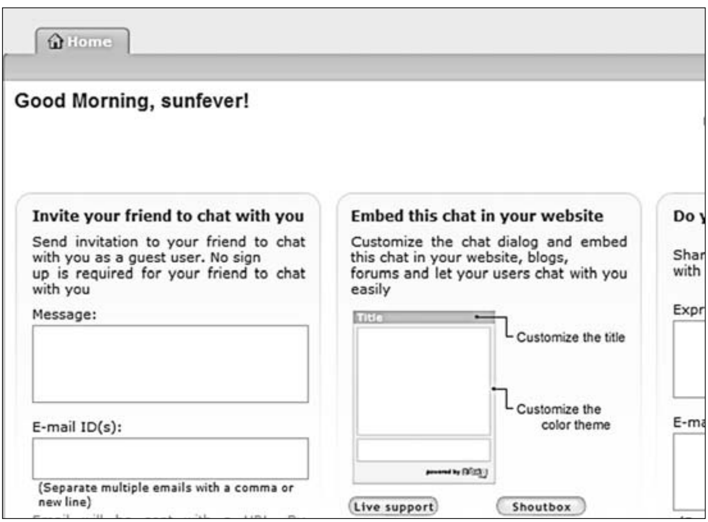
customisation options, Zoho Wiki may provide all the necessary features to get started on creating their content repository.

7.2.3 Zoho Chat

This is a Web-based chat software that allows you to chat with colleagues, peers, and partners without needing to install chat software. You can add contacts by adding their Zoho IDs or their e-mail addresses, which will automatically invite them to create a Zoho account to enable chatting with you. If you don't want your contacts to go through the hassle of signing up, you can also allow guest chat. This feature can be useful if you are planning to have a one-time chat conference and want to invite many users to participate.

You have the option of having a tab-themed user interface or a more traditional interface that simulates a chat messenger window.

Surprisingly, we found the tab interface easier to work with than the more familiar Desktop-themed, messenger interface style lay-

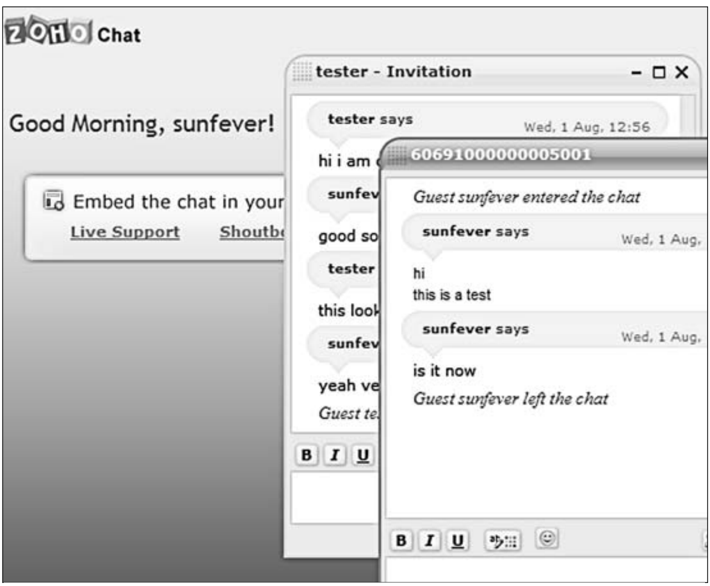


Chatting made simple by the use of the tab theme

out with multiple chat windows. This, we feel, is probably due to the fact that a tabbed interface is more suited to a Web page than a simulated messenger window.

All chat transcripts are saved, giving you single click access to conversation history and enabling you to review and analyse participant views on any topic. In any organisational setting, such a transcript archiving feature would be useful for internally reviewing and analysing conversations held with customers and external partners. An interesting feature here is the ability to embed the chat widget into a Web page as a shout box or a live support chat window.

A shout box chat allows visitors to your Web site or blog to chat with you and also among themselves in much the same fashion as an IM conference. In contrast, live support provides one-to-one conversation channels between your site visitors and you (or your support staff). These options open up your choices and there is noth-

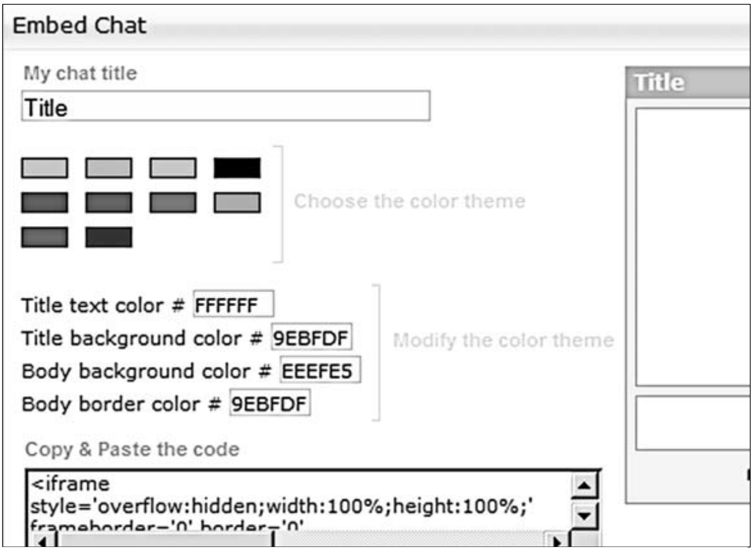


Chatting using a Desktop theme

ing preventing you from positioning a shout box on your home page and providing one-to-one live support with support staff on a contact page.

7.2.4 Preview: Zoho Mail (Zoho Virtual Office)

As of this writing, Zoho Mail is still in private beta. We were given an opportunity to take a sneak peek at the service, and here's the low-down on what to expect when it enters into public beta. A



You can embed Chat right into your Web site

word of caution though: some of these features may change substantially between now and the public release.

For those of you who want to get your hands on the service when it comes out, get on the waiting list by going to http://mail.zoho.com and clicking the "Request for an account" link. If you want to browse the features you can also click on the Demo link which will take you into a limited version of the application.

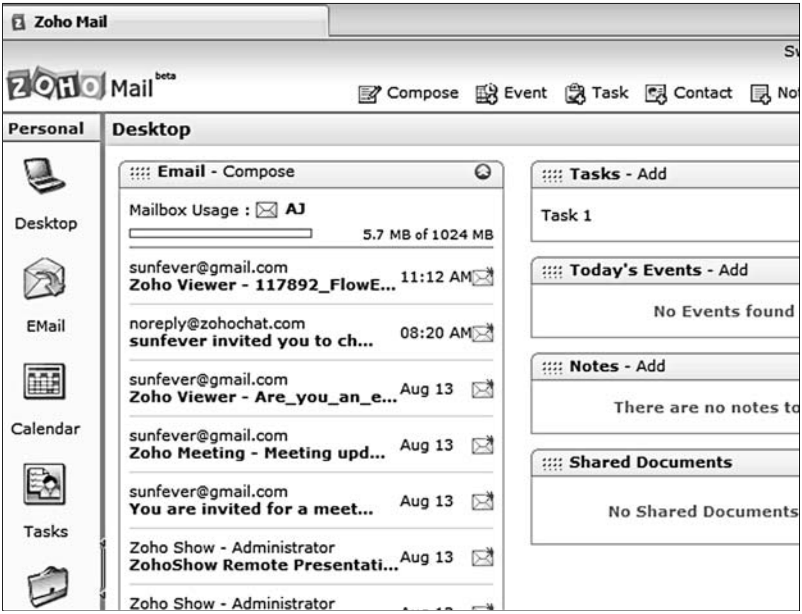
There is some confusion as to what it will be called; we think Zoho Mail, though in some parts of the site it's also referred to as Zoho Virtual Office. Given the functionality, Virtual Office may be more apt, but for now we'll stick with "Zoho Mail."

According to the site, it is going to be available "free for individuals" and at $3 (Rs 125) per user per month. Each user—free or paid—will get 1 GB of free storage, which can be used to store e-mail as well as documents. Paid users get additional space for storage of group documents.

When you log in to Zoho Mail, you are presented with the Desktop—a dashboard-like view of your mail, tasks, events, notes, shared documents, groups, announcements, reminders, and buddy list. This is a single-glance snapshot of your workday, which looks and feels somewhat more integrated than Zoho Planner. On the left pane, you can click on various icons that will open different applications like e-mail, calendar, tasks, and so on.

E-mail can be configured to pull your messages from one or more POP accounts. This includes support for secure SSL accounts, which is a plus especially for business users who may need to set up secure connections for their e-mail. The e-mail icon opens a typical Web-based e-mail interface. You work with it as you would with any e-mail application. In addition to the regular features you can also create tasks, events, notes and extract links from individual messages. This kind of cross integration feature provides great leaps in productivity when you want to quickly do things like create an appointment or add a task or annotate some notes based on a specific mail message.

You use the calendar to schedule your appointments and events. You can also create tasks based on the event or appointment, which is useful, though you do end up wishing that you could also see your tasks and other time-sensitive activities right within the calendar to give you an idea of current and future workloads.



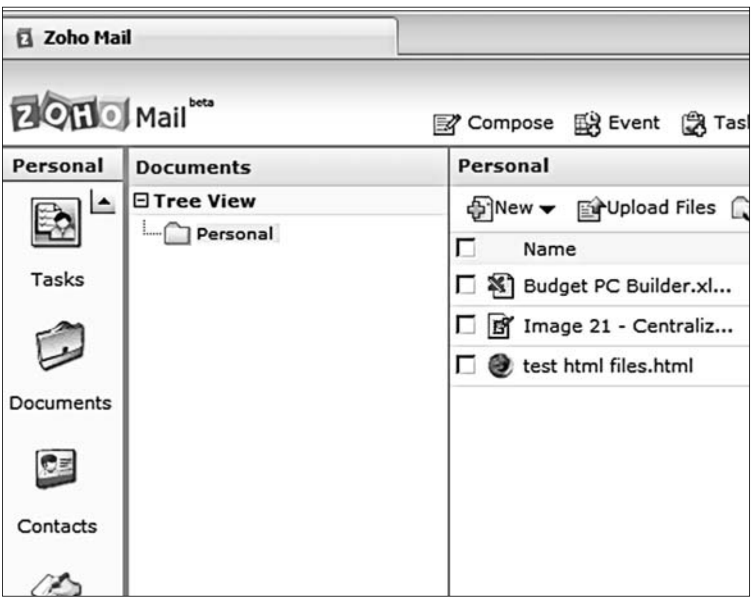
You can centralise your work with Zoho Mail

In the tasks section, you get to create and view all tasks created up until then. Tasks can be categorised, assigned to others, and viewed by status. You can also filter the tasks view based on calendar events or based on the source e-mail from where you created the task. Related calendar event or e-mail can be viewed with a click to get a clearer idea of the task at hand.

Notes is where you record free-form notes. This is a simple text entry tool and does not support any of the advanced features like Zoho Notebook. You can, however, e-mail out the notes with a single click. Likewise, the links section can be used to capture links from e-mail messages or directly enter a list of URLs. However, we have serious doubts about the usefulness of the links feature. This is a primitive form of bookmarks, and will need a lot more work to make it useful and useable on the scale of something like del.icio.us or Google Bookmarks.

The Documents section is where you store all your various files and documents. For Windows users there is a sweet spot here. You can use the Web Folders feature in My Network Places to create a folder that syncs with the Documents section in Zoho Mail. Basically, it's the same thing, but viewed in different ways. Being a folder on your computer, however, makes it all the more easy to copy and move files to and from the folder.

You should note that this Documents section is different from the documents stored with your Zoho Writer, Sheet, and Show accounts. While you can open all three (Writer, Sheet, Show) from within Zoho Mail and access the documents saved with each individual service there, there is currently no way to transfer those documents to the Documents section in Zoho Mail. Documents within the Documents section can be shared with other group members and made public.



Store and share documents online in the Documents section

Groups is a team collaboration feature which is still in the ovens. Essentially, it allows you to share documents between members of a group, hold discussions in a discussion forum, schedule group events in a shared calendar, and have a shared address book, shared tasks, and shared notes. Similarly, the address book also requires some work to support direct importing of your contact lists from other applications like MS Outlook and Gmail. You can, however, import contacts in standard address book formats like VCF, CSV, and LDIF.

Even with the defects, which may well be temporary, Zoho Mail has all the signs of evolving into a powerful Web-based collaboration suite that can replace many of your current applications by giving you a single window view of your tasks and workspace. What remains is to round out some rough edges and integrate the service both internally with Zoho's other services and externally with other services and service providers.

7.3 Personal Productivity

Being productive is as much about collaboration as it's about having the right tools to manage and organise your workday. Zoho's Planner and Notebook provide with you with a basic set of tools to manage your daily tasks.

7.3.1 Zoho Planner

Using Zoho Planner, you can get some order into your workday. You can group your tasks into categories by creating separate pages for them. For example, you could have separate pages for a project you're working on, general office related work, personal work, and so on.

Each page can have a description with details of what the page is about, a list of To-Dos, related appointments, notes, attachments, and tags. Each To-Do can have a main heading with a list of tasks under it each with a specific due date. Likewise, you can list your appointments and set reminders for them. Each page can

then be shared with multiple people by e-mailing them a link to the page or by making it public and sharing the public URL. Pages shared with your contacts can be edited and modified if you've given them the rights to do so. They would need to sign up for a Zoho account, if they don't already have one, to be able to make any changes to the pages. Again, the thorn in the side was the lack of integration to address books in other e-mail applications like Gmail and Outlook.

One cool feature is the ability to import your To-Do list, reminders, and appointments into iCal-supported calendars like Sunbird, Thunderbird, and Google Calendar. This way, you won't

Getting your workday organised with Zoho Planner

have to keep checking Planner for time-critical activities. Along with that, each page can be subscribed as a RSS feed, which you can view in your feed reader (Thunderbird, Google Reader, etc) and monitor any changes that shared users make to your page.

One feature that disconcerted us was the reminder list. A separate Reminders section allows you to create reminders; however, it doesn't list reminders for To-Dos or appointments, which can be inconvenient—you could miss out on some reminders especially when you the list is long.

The To-Do's overview calendar widget on the left pane gives you a quick snapshot of the number of tasks you've on each day of the month. That this is limited to just To-Dos is a bit disappointing...

Zoho Planner is still work-in-progress, but given the iCal support and RSS feed, we think it can make a serious contribution into bringing some organisation to your chaotic life.

7.3.2 Zoho Notebook

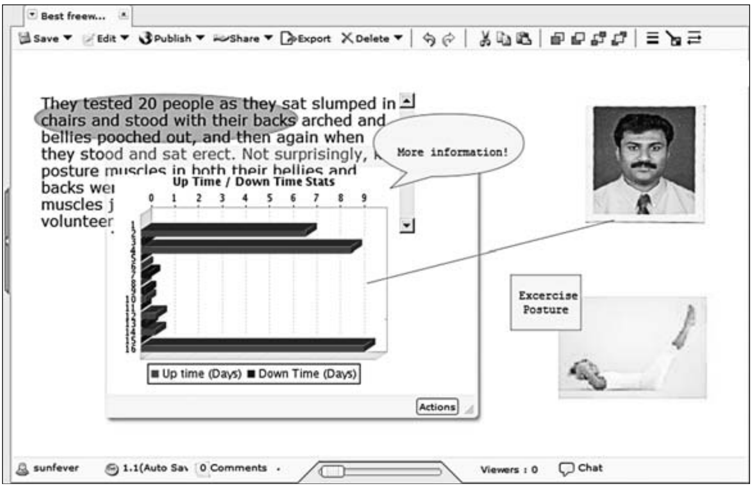
Zoho Notebook is versatile. Just like a regular notebook you can use it add text and notes, but you can also add pictures, Web pages, audio, video, HTML snippets, RSS feeds, spreadsheets from Zoho Sheet, and word documents from Zoho Writer! You can use five basic shapes—line, freehand line, rectangle, circle, and bubble—to add emphasis to your notes. You can have multiple pages, and, of course, you can have as many books as you want.

For Firefox users, there is an added treat by way of an extension that you can use on any Web page. Select the content, right-click, and choose Add to Zoho Notebook. Very cool. However, being a version 0.1 release, there will be some quirks—one which we found is that you need to be logged in to Zoho Notebook before the Add to Zoho Notebook extension will work.

Anything added to the notebook is treated as an object, be it pictures, Web pages, or any of the other elements listed above. Each

object can then be positioned anywhere on the page, copied from one page to another, sent to front, back, forward and backward, resized, pinned to a specific position on the page, and shared.

The sharing feature in Notebook is particularly interesting: you can share not only the book or page but objects as well. Sharing, as elsewhere in Zoho, can be to a specific list of persons who can have read-only or editing rights. Similarly, public sharing



Organise your notes and doodles from around the Web

can also be for the book, page, or object, which can be made available as a URL or embedded in your Web site or blog. In addition, you can have comments on the shared or public items. These can be comments at the level of an object—like a Web snippet or picture—and they can also be at the level of the page and book. This kind of ability to granularly share, publish, and comment on elements—right from object to page and book—is very powerful.

7.3.3 Zoho Viewer

This one is a quick and easy way to share documents in any of the following formats: MS Office (.doc, .xls, .ppt, .pps), OpenDocument

(.odt, .ods, .odp), OpenOffice (.sxw, .sxc, .sxi), Rich Text (.rtf, .pdf, HTML, text), and CSV.

When you want to distribute documents to multiple contacts without cluttering up your mailbox, or embed it in your Web site or blog, Zoho Viewer may be something to look at. You can share your uploaded files by just copying and pasting the URL, or by e-mailing all your contacts using the share link. Recipients require nothing more than a browser to view the documents.

In terms of usefulness it looks cool, but in terms of applicability, we are hard-pressed to figure how Zoho Viewer will weave itself into everyday use. As such, it is still a no-brainer to attach your files to your e-mail and send it off to your contacts. However, if you are uncertain about the software that your recipients have for viewing the files, you can direct them to the Zoho Viewer URL—they wont need to install anything. But we do see a benefit when it comes to embedding the document in your Web page or blog—just copy and paste the code and you are good to go.

Document sharing is made easy with Zoho Viewer

7.4 Business Productivity

Whether you're a budding entrepreneur or are running an established business, information is key to your survival and growth. From enabling you to create your own applications to managing your customer relationships, Zoho's collection of business productivity applications provide you with the tools to keep up with and even pull ahead of the competition.

A PDF document displayed in Zoho Viewer

7.4.1 Zoho Creator

If you've ever been frustrated by the lack of a suitable software application, either due to budget constraints or due to the lack of functionality that does exactly what you have in mind, Zoho Creator may be just want you need. Billed as an service that can be used to created and manage online database applications, Zoho Creator is in some ways the Microsoft Access of Web 2.0.

According to Zoho, "It relieves you from the pain of learning programming languages to build Web applications for your custom needs." While that statement needs to be taken with a pinch of salt, it still is relatively easy to create an online application with

Zoho Creator. What can take weeks or months with traditional software development or even with an application like MS Access can be accomplished in a matter of days, and that, with a minimal learning curve.

Of course, not all requirements can be met through Creator, but if your requirements are data intensive—say, for example, you want to maintain your expenses in a more organised manner or you want to build a small library management application—Creator will do the job perfectly well.

Building an application starts with creating a form. As a matter of good practice, it is advisable to spend some time doodling with pen and paper figuring out what exactly you want the application to do. On the first pass, try to keep everything as simple as possible to avoid running into dead ends and making you give up in frustration. Even with the simplicity that Creator offers, you need to rein in your imagination and take it one step at a time.

You can start creating your application in minutes

Once you have a fair idea of what your application will look like, you can get around to creating its forms. A form is a collection of fields that capture the data that users will enter. Creator supports about 20 types of fields, which should be sufficient for most types of requirements. You can further define rules for each field: what the valid entries are, what action should take place when users input data, and what action should take place when the field is updated.

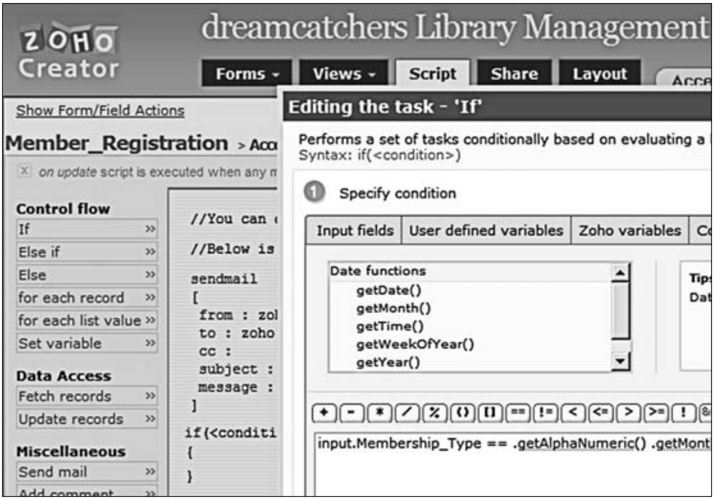
These rules are defined using a scripting language called Deluge. If you've already turned off on hearing the phrase "scripting language," hold on... it's not as hard as it sounds! Using Deluge is relatively easy. The language is presented in an easy-to-understand format which is about as close to the English language as programming languages will get in this day and age. If you take a few minutes to play around with it and get a hang of how to work it, you may even be able to get your application to do the Macarena! Well... almost.

The Deluge script that controls the behaviour of your fields and forms can be worked with in two ways: using the script builder—a visual drag and drop tool, or by using free flow scripting—a form where you write the script directly in the old-fashioned way loved by code jockeys.

How you go about creating your application will depend on past experience. If you've had some experience working with code or understand programming concepts, you will find using Creator a breeze. From concept to rollout of the application may be just a few hours.

What's cool about Creator is that you can embed the application in your Web site or blog—basically any Web page that will accept HTML code.

For example, you can create a custom contact form and embed it in your Web site. For the case when visitors fill out the form and hit the Send button, you can customise Creator to not only store

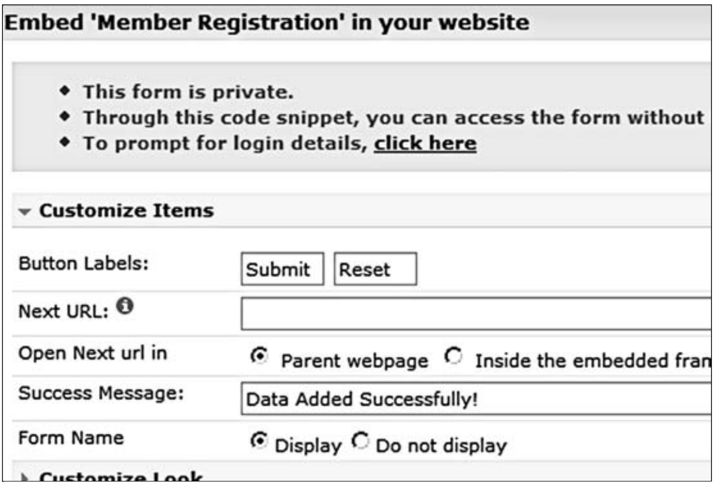


Use the script builder to control field behaviour

the data in an online database but also send you an e-mail alert informing you of the entry. We think that's cool. No more paying a programmer an insane sum of money to do something as simple as a contact form.

Writing scripts directly

If you're a newbie, don't even try scripting on your first attempt. Not unless you have the stamina to want to imbibe the concepts. It's really not that hard, but we advise you stay away from scripting till you get at least one form up and running. There will doubtless be hundreds of things you want your form to do; we repeat: take it one step at a time. Nothing is as defeating as not being able to see your application up and running. That, and impatience. Once you're past that initial curve, though, Creator can be addictive. The kick you get from building your own software application will keep you coming back for more.



Embed the application into your Web site

7.4.2 Zoho Projects

Projects need managing. However much we wish projects would run on autopilot with a pair of Nike just-do-it shoes, they still need managing. If you've ever worked with Microsoft Project, you will quickly realise how project management can be a complex, nerve-racking affair—that's the project software, not the actual project itself!

Zoho Projects is simpler. It uses the basic rubric of project management: milestones and tasks. While primarily geared to soft-

ware projects, the structure is loose enough to accommodate almost any type of project. Open source aficionados rejoice: while the closed source world can only have one project running for free, OSS teams can run unlimited projects for free.

Milestones are the major markers in your project. For example, if your project is to build a Web site, your milestones could be: design approval, pilot testing, private beta, go live. In Zoho Projects, each milestone can have an associated task list. Each task can then have specific To-Dos with a duration and user assigned to it. Users can then update the progress of each task as a percentage of completion. Tasks can also be independent of milestones, though from a project management point of view, it may be better to group tasks under specific milestones. This will depend on your project management style, and since the essence of the matter is to get your project completed on time, the choice yours—whether you use milestones linked tasks or just define your tasks independent of milestones.

You can upload project-related documents, schedule meetings, and even have your users maintain a time sheet. The calendar

Plan your project milestones and tasks

interface gives a quick snapshot of the number of tasks and milestones on each day of the month. You also can create a new task, milestone, or meeting directly from within the calendar. In addition to which, you have a discussion forum and project reports in the Gantt chart format.

What we find missing is a method to constrain the tasks to be within the start and end dates of each milestone. Keeping track of the milestone date while entering the task information can become confusing when you have tens of tasks leading up to each milestone. You could end up setting tasks that go way beyond the milestone date without being any the wiser. Similarly, an indication of the daily task load on each assigned user would have been useful, as you need to manually check whether you are overloading work to each user.

These two features aside, Zoho Projects can fit the bill if you need an uncomplicated project management system that multiple users can use without draining your wallet.

7.4.3 Zoho CRM

Businesses have customers. Before they can be customers, though, they need to be found, chased, mollycoddled, cajoled, persuaded, and won over into doing business with you. When you have one potential customer, it's easy. When you have ten, you can feel the sweat have up. Have twenty and you find keeping track of what's happening with each potential a struggle: you begin to keep notes, start using spreadsheets, have calendar reminders, start pinning yellow sticky notes to your fridge door and car dashboard, and start dreaming of software that would make your customer management tasks simpler.

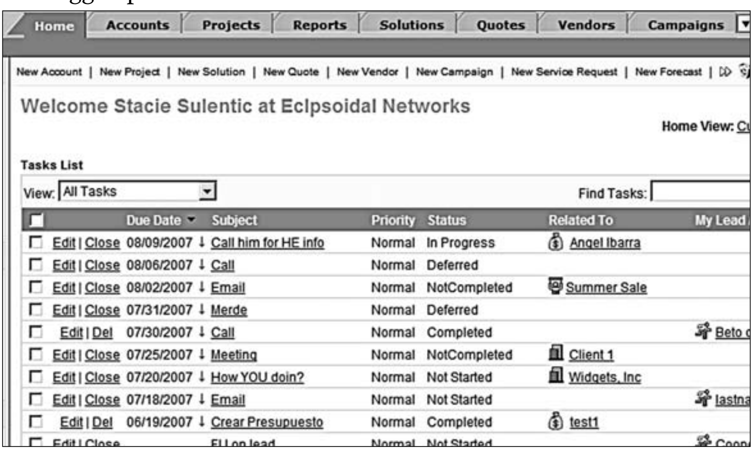
Bang! Enter Zoho CRM.

As customer relationship management applications go, Zoho CRM is feature-rich. It supports both pre- and post-sales customer management as well as order management—right up to invoicing

the customer. It's free for the first three users and $12 (Rs 600) per month for each additional user. That's a pretty good deal considering that SalesForce.com, the 300 kg gorilla of the CRM space, charges $600 (promotional pricing—may go up later) for their cheapest, five-user group edition, which in comparison would cost $288 for five users at Zoho. SalesForce has a greater depth of functionality, of course, but the complexity may be overkill if your sales processes aren't that mature. Besides, if you have a small two to three-person sales team, you can't beat the price—free!

At an extra $3 (Rs 125) per user, you can also get integration with MS Outlook, which allows you to synchronise your Outlook contacts, and also enables e-mailing in support requests that will initiate a new support ticket (known as Case in Zoho CRM). What's missing is calendar synchronisation and Thunderbird / Lightning support. In comparison, SalesForce is also limited to Outlook, though the level of integration is deeper.

If you're new to CRM systems, at first glance it may seem overwhelming. The tricky part is to get your users to be consistent in using the system on a regular basis. That can only be achieved by dogged persistence.



Whip your sales team into shape!

Zoho CRM covers the entire gambit of functionality for the CRM space but is strongest in Sales Force Automation. One benefit with a product like this is that you get your sales team to adopt best practices in managing the sales pipeline. You can track a potential customer from the moment you are able to initiate contact with the individual or organisation representative, right through to quotation submission and winning (or losing) the order. Zoho suggests stages in the sales pipeline that you can use or modify according to your specific industry requirements. After-sales support is managed through the Cases and Solutions feature, which essentially generates a support ticket for each complaint and enables customers to submit their requests directly via a Web form, or indirectly over the phone and through other, traditional channels.

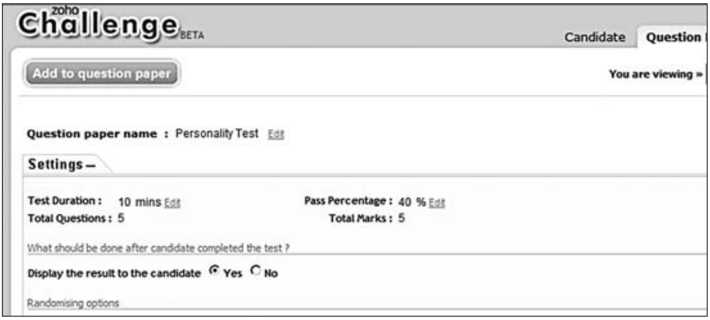
Marketing management, which relates to your advertising and promotional campaigns, is also supported, and you can link your sales activities to specific campaigns. This will help you identify the campaigns that are most effective and allow you to fine-tune your marketing strategy.

A barebones inventory management system helps you keep track of your stock, and manage your product catalogue and purchases. If you have an extensive list of products, you can create a product catalogue of your product range and have price books unique to each customer. This is a frequent requirement when selling the same product at different prices to many customers.. You can also manage your purchases by maintaining a database of your suppliers (vendors) and issuing purchase orders for your various purchases. However, this is at best a stop-gap. If you have inventory of substantial value, it is better you consider a full-fledged order processing and inventory system that can give you greater control in managing your stock movement.

We've barely scratched the surface of all you can do with this application, but suffice it to say that if you're looking for a cost-effective customer relationship management application, Zoho is

an easy choice. With its rich feature set and integration capabilities, you will find it hard to find a product that delivers as much at the price point.

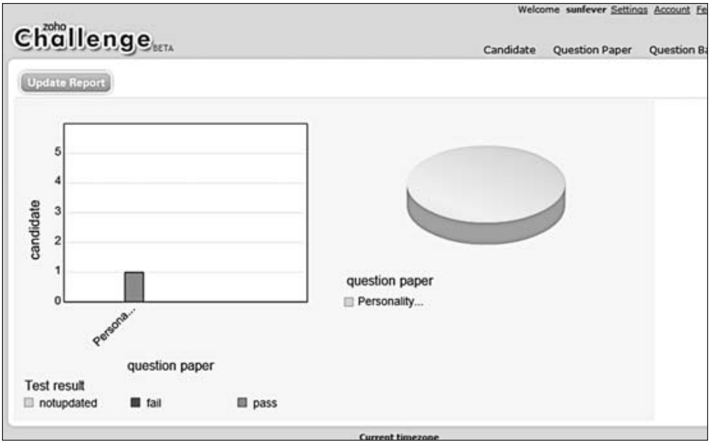
7.4.4 Zoho Challenge



Filter potential employees with minimum fuss

These days, in any field, candidates are many, but those who actually know the subject are few. Zoho Challenge can be a useful addition to the recruiter's or HR executive's arsenal. It's an online Q&A application that can be used to create question papers that test the skills of potential employees. You can test up to 25 candidates for free; beyond that, you need to convert to a paid account.

Setting up a question paper is simple. You first create a question bank of all the potential questions you'd like to throw at your candidates. Questions can be multiple-choice or descriptive. Tag the questions with the appropriate labels by subject matter. Then create a question paper and select questions from your question bank. The questions can be both compulsory and/or random. Once you've created the question paper, add your candidates, select them, and use the template form to invite them to take the test. The invite can be customised, and a template based on your customisations can be saved and re-used. Once the test results are in, you can view the candidates' response details and also a neat graphical report on all the candidates who have taken the test and their performance.

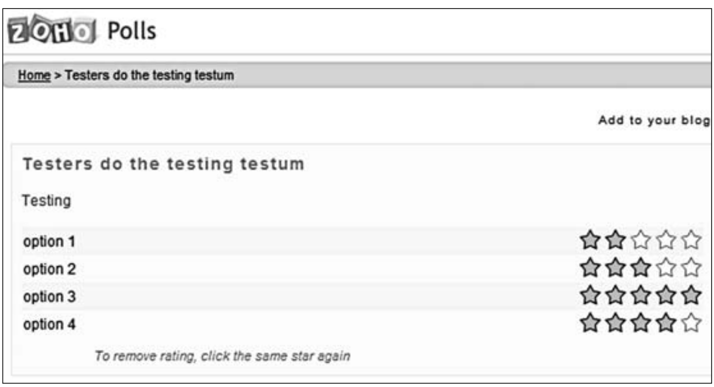


Some quick stats on candidate performance

7.4.5 Zoho Polls

Zoho Polls is a quick way to set up an online poll that can either be option-based or rating-based. You can add the poll to your Web site or blog by simply snipping the HTML code and embedding it into your Web site.

Polls can be either public or private. The Private option enables you to run surveys to closed user groups (like your customers or



Find out what everyone thinks using Zoho polls

vendors). Voters can comment on the poll and you can control whether comments will be visible to everyone or just to you, and also whether or not the results should be shown to the participants. One interesting extra is you can export the results to a CSV file. This way, you can repurpose the results and present it in different formats.

7.4.6 Site 24x7

This is a Web site monitoring service that could be considered by site owners who derive revenue from their sites. We weren't able to test the service for this review, but from the looks of it, Web site managers might find the list of services offered compelling enough to sign up. Free for two URLs, the pricing starts at a $0.50 (Rs 21) per URL per month. You can monitor the performance of your Web site, uptime / downtime statistics, and similar parameters which can be automatically e-mailed to you to you periodically.

This kind of independent monitoring service becomes important when you need to ensure that your Web site performance is of high quality and that you are not suffering downtime with your hosting provider.

Accounting

Financial reports and account books, in regards to their proper maintenance, can make a huge difference to the success of a business. From multinational corporations to superstores, everyone now relies on computers to maintain accounts. This chapter goes into a free software that suits the accounting purposes of small and medium businesses.

8.1 Tunir Accountant 2007

Many free software solutions for accounting are available on the Web. We chose Tunir Accountant 2007 after analysing a number of limitations of other software packages, such as:

❍ Applicability to Indian accounting standards
❍ Applicability to Indian business practices
❍ The VAT and TDS management features included

Tunir Accountant 2007 (TA) is a user-friendly accounting as well as inventory management software suitable for any small / medium business. It's a free software product with features that help you maintain and practise various accounting transaction entries.

The best part of what's bundled in the software is the Magic VAT and Magic TDS management. One doesn't need to take the extra burden of calculating VAT and TDS charges separately. To use this software, the user is expected to have a basic knowledge of accountancy and book-keeping.

8.2 Initialisation Steps

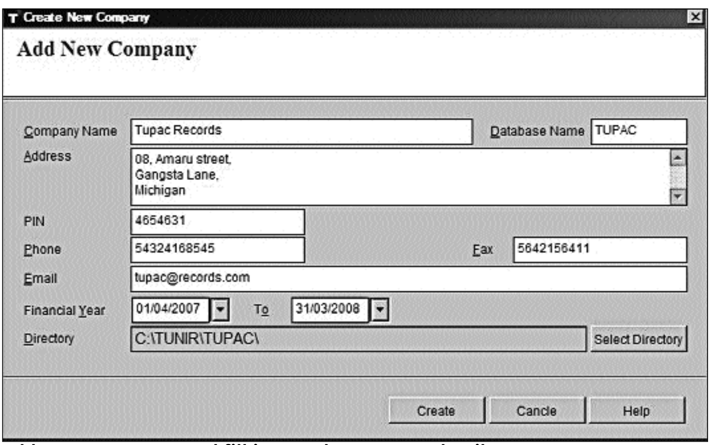
Begin with installation, consisting of a few clicks, from this month's CD or DVD. Post installation, when you run the software, you'll be asked to view a demo. It's advisable to view the 1 hour 33 minute demo prior to using the software.

When you fire up the actual software, a login screen appears. It asks for a username and password; this is so that only an authorised person can access the book of accounts. By default, the username and password are both set to "admin". These can be changed later.

The login feature enables multiple users to work on the software

Choose a (current) date from the calendar. This will be used as the default starting date for the entire application. The box on the left in the login window will show a list of companies defined on the PC (if any). Companies can be accessed by choosing the current year (the year chosen as the default accounting year), all companies, or by accounting year.

8.3 Adding A Company



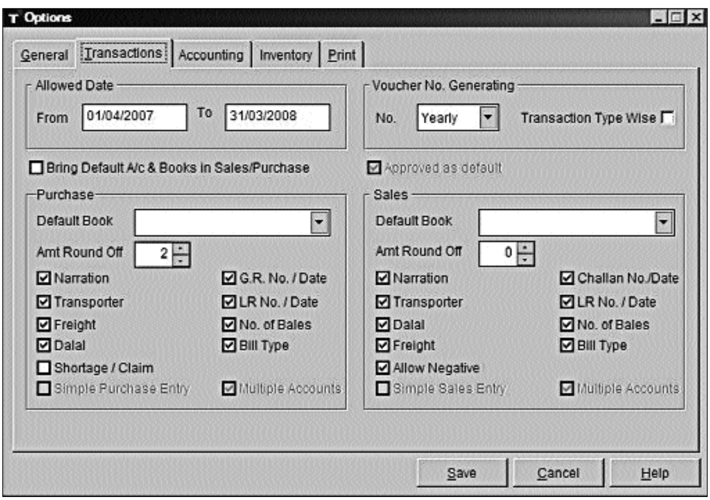
Add a new company and fill in complete contact details

Select a pre-defined company, or add one. In our case, we've created "Shady Records" as one of the companies. You can add a company after logging in - select Company > Add Company. From the Company menu, you can Add Company, and Edit or Delete Company. This will show up a new window, in which details about the new company are to be filled.

Fill in details like company name, database name, contact details, financial year, and the directory to save the details (in .mdb format) of the new company created.

8.4 Setting Company Options

After you've created a company, you'll need to set some default options before you start making entries for that company. Press [F11] for Options to get set of options to customise the Shady Records accounts functions, which can be altered through various tabs.



Set dates, books and other related options for the company.

Using the General tab, you can set the approval settings (in accordance with the transaction type, or book-wise). Customise the background area of the software by choosing a custom colour or image. Also, 3D effects can be added to text boxes. You can set options to allow multiple users to work upon the particular company you've chosen and edit the closed books of accounts.

Integration of Accounts with Inventory can be set from the Accounting and Inventory tabs. The Transaction tab gives you the option to set the date, voucher generation options, and the Purchases and Sales options. Users will be allowed to make entries for transaction between those set dates related to the company.

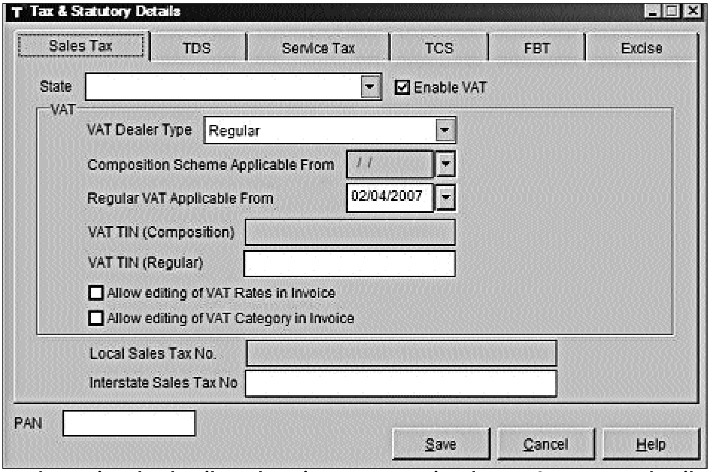
After setting the dates, you can define your default Purchase book and Sales book. In case you haven't defined them, the last used book for Purchase/Sales will be used as the default Purchase/Sales book. Check the boxes for options like Narration of entries, Transporter, Freight, Dalal (broker), Shortage/Claim, etc. for both books.

The period of voucher generation can be set on a Daily, Monthly, or Yearly basis. The Print tab allows you to set printing of invoices on plain paper or a predefined voucher format.

8.5 Adding Tax And Statutory Details

Next, to set the Taxation and Statutory details about the company, press [F12] and a window will pop up. In the pop-up window, you'll see tabs for Sales Tax, TDS, Service Tax, Excise Duty, and other statutory settings. As of now, only the Sales Tax and TDS settings are available. Enter the PAN (Personal Account Number) of the company in the box located in the Tax & Statutory Details window.

Under the Sales Tax tab, you'll need to add a certain sales tax number and VAT-related information after setting the relevant



Predetermine the details and settings to customise the Tax & Staturary details for usage

options. If you want to enable editing of VAT in the invoice or voucher, enable the options to allow editing of VAT rates.

Similarly, if you want to enable TDS settings, check the box to enable the TDS tab, fill in the basic TDS details, and add tax-related information. A predefined list for nature of payment corresponding to the TDS account is listed in the Nature of the Payment sub-tab under the TDS menu.

The TDS charges as per the transaction will effect depending on nature of payment. If you want to change the TDS account effect depending on the nature of payment such as Commission or Rent, under the Nature of Payment tab, click on the corresponding column next to Nature of Payment, and a menu will pop up showing a list with types of TDS Accounts. Under this menu, select any of the TDS accounts, and the corresponding effect of that in the respective books become visible as the tree below in the pop-up menu.

8.6 User Management

Select User Management from the Company menu and a window will appear where more users can be added. Along with that, a Task Authority can be assigned to the user, which includes accessing or editing transactions of an account, accounting book (profit and loss account), and the company.

Access authority and restrictions to the users can set in accordance with the company list and task list. For instance, one can give a user access to edit the transactions and books of accounts. Likewise, only 'Admin' can add new companies and not any other user.

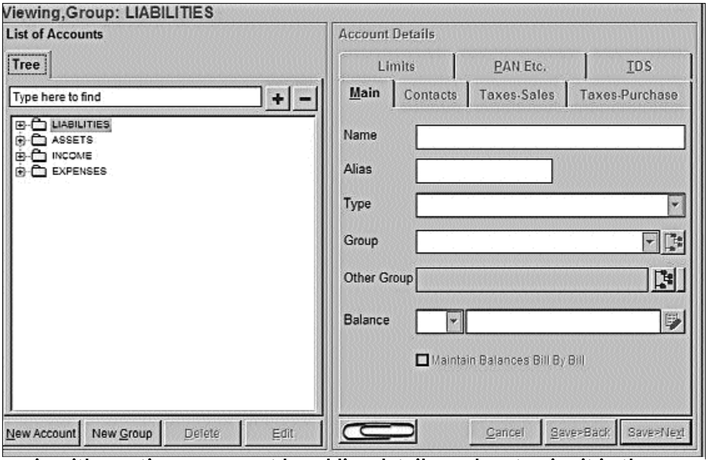
8.7 Creating A New Account

Hit the shortcut for Account - [Ctrl] + [Space] - and the Account menu will appear, wherein you'll find two sections: List of Accounts and Account Details.

Click New Account to make a new account, and under the Account Details column, the Main form of details will be active.

Suppose you have to make a supplier's account. Enter the name of the account, say Nut Crackers Corporation, and add an alias (say NCC) if the account is to be used frequently. Now choose the Account Type as Supplier from the drop-down menu or by clicking on the button adjacent to the box.

In keeping with accounting principles, Suppliers fall under the Sundry Creditors group. So, select Sundry Creditors from the Group option. Also, Sundry Creditors appear in the Balance Sheet as well, so any transaction that affects them will affect its Assets group. Therefore, select Advance to Suppliers from the Other Group option. Note that the other tabs under Account Details section become active.



Begin with creating an account by adding details, and customise it in the initial stage to ease off the accounting process

In these now-active tabs, one can add contact details, set balance limitations, add PAN related details, enable TDS if you wish to charge it, and also, settings of Purchase-Sales related taxes can be enabled.

New groups can be created under existing groups for accounts - Liabilities, Assets, Income, and Expenses. So if you wish to add a new group, navigate to anywhere under the Account Groups tree and click New Group to add and name the group.

Select Save > Next to continue creating other necessary accounts from your books of accounts following the same procedure.

A feature of note here is, you can attach document files related to that respective account. Suppose you have bills, agreements, or any other legal document relating to a supplier; you can add that to the respective supplier's account.

In the Account Setup window, navigate through the groups and select the account which you used to add documents. The

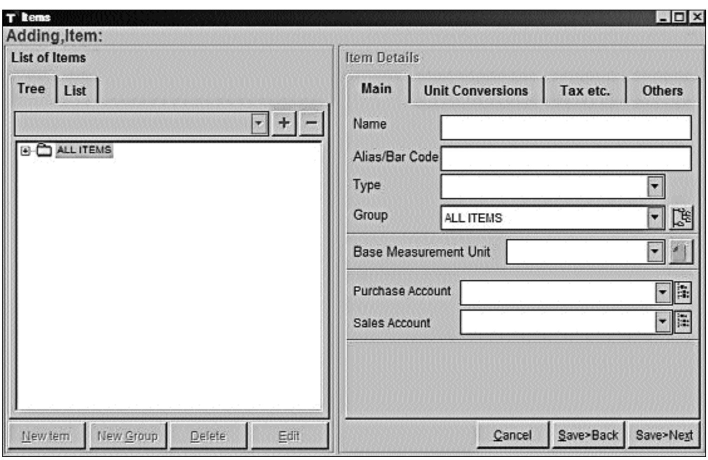
accounts once selected, click on the paper-clip icon in the window, and it will open the Attachments window. Any document - say in .doc, .pdf, .txt, .odt, .xls or any other format - can be attached. You can attach as many documents you want to an account.

8.8 Creating A New Item

The steps for adding new items to the account are very similar to that of creating a new account. To add new Items, go to the Masters Menu and select Items Setup. The Items Setup window, very similar to Accounts Setup window, will appear. Here you'll find two sections - List of Items and Item Details.

In case you have a lot of Items to add, you can create Item Groups such Milk, Sugar, Cement, etc. Then create a new group under the All Items group by clicking New Group.

Click New Item to add a new item to the accounts; this will activate the Item Details section. Here, fill in details like name, alias / bar code, type of Item (raw material, finished goods, scrap,



Add items and create new Item groups. Customise Item Settings by adding details such as unit conversions, tax charges, and others

etc.), select the Item Group, choose the Base Measurement Unit (grams, litres, metres, packets, etc.) and select the type of account you want the transactions related to that Item to be recorded.

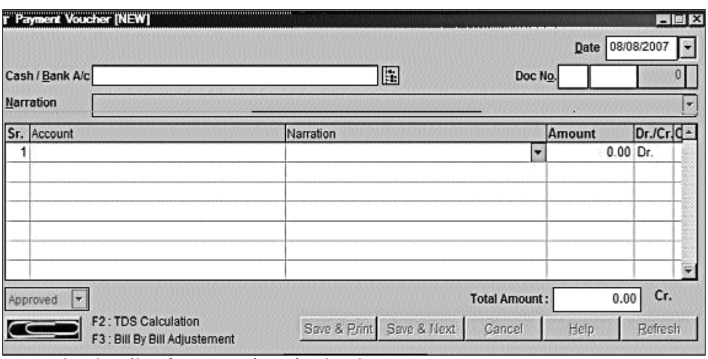
Using the Unit Conversion tab, define unit conversion factors. This will make computation of items quick.

Using the Tax tab, you can set charges such as VAT or discounts on Sales or Purchase of items well in advance. This will save the time of calculating charges or discount on items, and will automatically get added to the bill. In the Other tab, select Stock Valuation and Market valuation as Average Cost and Average Price respectively.

8.9 Start Recording Transactions

Once the basic setup of Company, Accounts, and Items is done, you can start recording transactions. Suppose you have made a payment by cheque through Free World Bank, go to Transactions > New > Payment.

Alternatively you can press [F6] to directly load the Payment Entry Document screen. Once the screen is loaded, choose the date and hit [Tab] to get a pop-up menu. This will show a list of Cash and Bank accounts for selection.



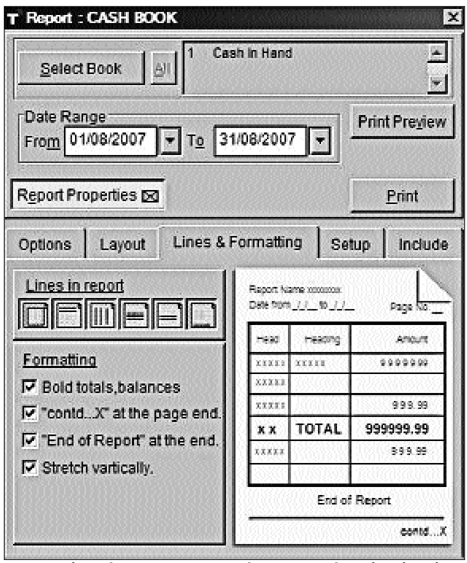
Enter the details of transactions in the document screen

Likewise, keep clicking on the fields on the Payment Voucher screen to add the Account details, Narration, and Amount in the respective boxes. After adding the necessary details related to the transaction field area, you'll get the total amount for that transaction.

Note that you can also make TDS Calculation using [F2], and Bill by Bill Adjustment using [F3]. The corresponding effect of this transaction will automatically be recorded in their respective Account groups.

8.10 View Report Summary

An interesting feature is present to preview different reports such as Ledger, Books, Final Account Reports, and even statutory reports of TDS and VAT. A unique feature under the Reports menu is that the report layout can be customised for account books - Cash Book, Bank Reconciliation Book, Bank Book, and Journal Voucher register.

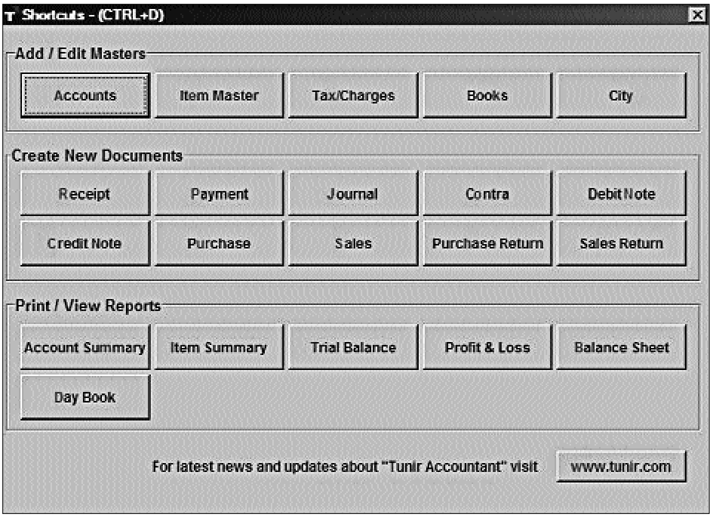


Customise the Account Books report by viewing it in print preview before printing it

Choose one of these books from Reports > Books and then click on Report Properties to customise the layout, formatting lines, change setup, etc. of the Report Layout.

Make the best of this feature: by using the report function, you can prepare Form 16A of TDS and even compute VAT reports and view a summary.

8.11 Frequently-used Shortcuts



Buttons as shortcuts enable faster accounting process

The process of accounting can be performed quickly by using the shortcuts provided. Open the accounts of any company and press [Ctrl] + [D], or select View > Shortcuts.

You'll get a separate window containing shortcuts to different account functions. These functions are divided into three groups: Add/Edit Masters, Create New Documents, and Print/View Reports.

Sub-categories can be accessed by simple clicks or by pressing the appropriate keyboard hotkeys (the letters in red). For instance, press [A] for accessing the Accounts sub-menu and so on.

Certain accessories have been added to the software in order to improve productivity and make things easy for the user. These include a calculator, a calendar / diary, a conversion assistant, and also a text viewer.

8.12 On The Whole

Tunir Accountant is a decent software and is meant for use amongst small and medium business enterprises. It's simple to use, and is packed with features. It takes into account the Indian scenario.

Free is not always best. There are some bugs: at times, for instance, the Cancel and/or Close button doesn't work in certain windows. But we believe informing the developers will help.

The all-important features of TDS and VAT management are incorporated in TA. These were rarely seen in other free software.

Inventory Management

The way content or information is stored and managed in an organisation is quickly changing. We have come a long way from the bulky Content Management Systems (CMS) of the past to the present day genre of free tools that help in inventory management. This chapter gives you an insight into inventory management and the tools you can use to get your small business computerised in no time.

5.1 Inventory Management: What It Is

In general accounting practice, inventory management is a task that involves the recording and maintaining of logs of all goods that have been purchased and sold. Today, however, this task has expanded to include a real-time analysis of stock in the inventory, predicting how much stock will be required in the future, and how to allocate funds for purchasing various inventory items. Inventory management is also a process that keeps in check the cost of procuring and selling of goods, taking into account shipping, handling, and other related costs.

Successful inventory management aims at the following:

a. Keeping a wide variety of stock, at the same time having enough stock of items that are sold regularly
b. Keeping stock levels at an optimum, neither too low and neither too high
c. Making purchases in bulk to avail lower prices and making sure that obsolete or slow-moving inventory is phased out

There are various hurdles, like geographic distribution and different time zones, in successfully deploying inventory management over a large business, but for a small business that is run on a single inventory, there are programs available that do the job well.

There is a lot of CMS software available in the market that caters to the needs of small and medium businesses. The only factor is the prohibitive cost of such software. However, there are a handful of free programs that can be useful for your small business. Let's look at two of the most popular and free inventory management tools.

5.2 Maintenance Assistant

This easy-to-use program offers users a powerful maintenance and inventory valuation solution. The interface is completely customisable. The developers have targeted the application towards small businesses and home users. The software can be scaled to add more users as your business grows. An advantage of Maintenance Assistant is that it can be run on a Windows, Macintosh, or Linux machine.

In order to explore all the features of the software, let's assume we have a computer hardware store, selling computer parts. The store has three employees whose primary role is to assemble computers.

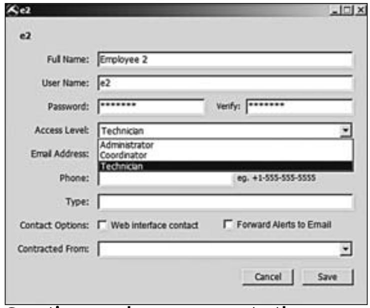
5.2.1 Installation

You can download Maintenance Assistant from www.maintenanceassistant.com. Once you have installed the software, you need to make an Online Community Account; this is created to provide easy access to your inventory from any computer that has the software installed. Having done that, you have to create an "administrator" profile in the software, so other users of the software cannot alter information from your inventory or maintenance database that is saved locally on your computer. This database is accessible online via the Maintenance Assistant Web site using the administrator profile you created earlier.

Creating an account in Maintenance Assistance

Since the software allows one to computerise the entire process of taking orders to selling the final product while keeping

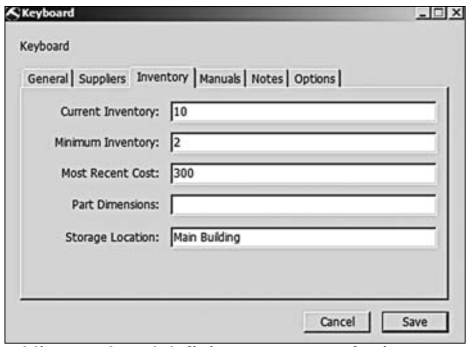
a tab on the inventory, we went ahead and created login profiles for the three employees of the store. We could provide them access for Technicians and Co-ordinators; we chose Technicians because we did not require them to access any data from the local computer.



Granting employees access to the software

5.2.2 Setting up the store

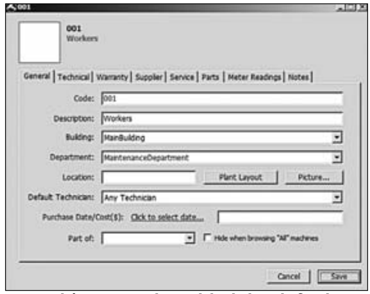
Once access was given to all the employees, we went about creating a list of all the suppliers from whom we could procure our computer parts. After clicking on the Suppliers panel, we found you can add an infinite number of suppliers to the list. Also, while entering their address details, be sure to enter the phone numbers in +91-xxx-xxx-xxx format. This will let you call your contacts via the Internet using a VoIP program (Skype in our case).



Adding stock and defining parameters for it

After entering a list of all the suppliers, we went about creating a list of inventory under Machines and Parts > Parts. Computer parts like keyboards, mouse, monitors, printers, graphic cards, etc. were included. While adding the inventory, we entered the total quantity of each item. We also defined the minimum quantity per inventory item, so that if the stock falls below that quantity, the software will automatically e-mail the supplier of that inventory item, requesting for more stock.

5.2.3 Creating work orders



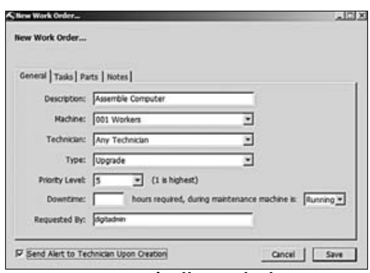
A machine must be added, by default

Changes to the inventory are automatically tracked when you utilise some of the items there. In order to do so, you need to create a request note for the employees to do a particular task. This note, indicating the task, is called a work order. When the employees log in to their accounts, they will be able to see the pending work orders and act on those.

While creating the work order, you can select the inventory items and their quantities needed for the job. This tracks the items with those available in stock and automatically corrects the inventory values to reflect the most updated stock position.

Even if your store doesn't require any manufacturing machinery, you need to add at least one dummy machine to your store. This is done so it can be assigned to a particular work order for the job to be done.

To create a work order, go to Maintenance > Work Orders. Here you can add a description of the work to be done and also assign a specific technician to do it. The task can be set to close at a definite period of time or go on indefinitely among other things.



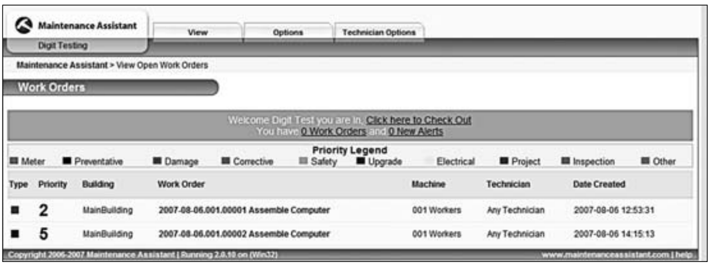
You can automatically track changes to the inventory

While creating a work order, you need the specify the inventory parts to be used - and their quantities. When the given period for a work order is completed, the inventory parts used in the work

order automatically get subtracted from the inventory. In case of indefinite work orders, the inventory items are subtracted when the technician working on the order closes them.

5.2.4 The Web interface

A unique feature of Maintenance Assistance is its Web interface. During installation, the software automatically create a server that will then enable access via the intranet or via the Internet. You can have your employees access the inventory and their work orders from anywhere in the world. The only requirements is that



An employee's view of the Web interface

the computer must have a copy of Maintenance Assistance running on the computer. To ensure that the employee can access the work order records, the Maintenance Assistant software has to be running on the server as well.

Employees log into the software using their login IDs. Once logged in, clicking on the Web Interface tab takes them to the work order page, which opens in the Web browser. From there on, they can check various settings.

Any work orders assigned to the employee will show up first based on their priority and then based on the time allotted to the task. Once a task is completed, the employee can close the work order. Doing that will subtract the inventory items used from the available stock.

While connecting to the software from outside the intranet, you need to first make sure your server's network is set up for

remote access and that the ports used by Maintenance Assistant are forwarded properly on your router and firewall. If you don't know what port forwarding is, visit www.portforward.com, and if that doesn't help, bring in your network administrator.

5.3 Action Point of Sale

Another free program to manage inventory is Action Point of Sale. Akin to Maintenance Assistance, this program, too, allows the user to develop a computerised process for saving information related to sales and inventory.

5.3.1 Installation

Installing Action Point of Sale (APOS) is simple. Download it from www.actionpos.co.za or get it from this month's CD. One thing to note here is that, in order to install APOS, you have to be connected to the Internet. The software connects to the Web and activates itself automatically online. Once that's done, the software can be run as many times as you want.

5.3.2 Setting it up

The first time, APOS loads a little slowly, trying to look for inventory information stored in its proprietary format (.refc) on the hard disk. When it cannot find any such information, it opens up a Wizard that allows new users to add backed-up data to the newly-installed program. The Wizard allows you to create an "Inventory Master File" or a "Users Master File", among other options.

The first thing to do when adding inventory is to add suppliers' details. You could do so by clicking on the Suppliers Master File and filling it up using our previous example.

The first time Action Point of Sale is run

Once we had all the familiar suppliers, we could then add inventory items against their names in the file. The APOS interface is modelled on the Windows XP interface.

After creating an inventory, we set about giving individual access to employees. We went into the Users Master File and created user IDs for all of them. In APOS, the employees create three-digit passwords when creating their accounts. After the accounts were created, we clicked on Sales, and that allowed us to prepare a bill after entering the login and password.

Entering the Sales area of Action Point of Sale

As the bill was prepared, we noticed the tax and VAT charges being automatically applied. There is also a place in the Wizard where you can define the tax and VAT percentage on the entire bill. The selling point of Action Point of Sale is that you can define unique selling rules for each of your employee's logins; for example, employees of a departmental store may not be selling the same product across all counters. With APOS, you can tie specific inventory to appear under specific employees.

5.3.3 Other features

Like Maintenance Assistant, APOS, too, automatically tracks sales and any changes made to the inventory. Any item going on sale is deducted from the inventory. To check the history of goods bought and sold, you can click on Transaction History. This shows a list of sales and purchases, which could be printed if needed. The searches can be filtered to show results from particular days to between a set number of days. The next option is Reports, which can generate, in Excel, reports of the total purchases and sales.

5.3.4 Customising the software

For added security, APOS allows the user to set a master password

for the sales and purchases report. You can set that by going into Setup and Master Files > Security + Performance Master File. Another feature of the software is its ability to print sales receipts off more than one printer in the store. Each employee's login can be assigned a separate printer.

Action Point of Sale is best suited for a rather small business, in keeping with its ease of use and functionality options.

Mind-Mapping With FreeMind

Mind-mapping has been hailed as one of the best methods to keep your thoughts organised, and over time, we've seen mind maps being applied not only to personal thoughts, but for brainstorming sessions and meetings as well.

If you don't want to spend your time drawing complex mind maps (or if your handwriting is worse than your family doctor's), you can dump your thoughts using FreeMind - a free, open source mind-mapping tool that gives you all you need to create huge mind maps, and make them look good enough to use as presentations, too.

9.1 The Mind-mapper's Primer

An example of a mind map

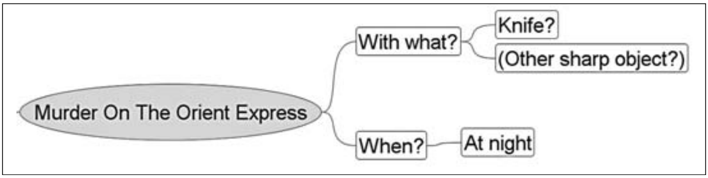
When you're working on an idea or task, your brain doesn't make neat bulleted lists to gather your thoughts - it starts at a central goal or theme, and many trains of thought burst forth from there. An upcoming presentation starts you thinking about your audience, which in turn starts you thinking about what would appeal to them, and it snowballs from there. To capture all this on paper (or screen, for that matter), you draw a mind map. Start with your central theme; this could be the theme for your next team meeting, a task you have to accomplish, or anything else that warrants considerable thought. Then jot down the first thing you think about it right next to it, and any more thoughts that occur to you in the same vein. Repeat for each thought. The example below, and the pages that follow, should be more illustrative:

9.2 Getting Started With FreeMind

FreeMind's user interface is simple enough - the toolbar at the top gives you basic control over the application: open mind maps, create new ones, format text and so on. The toolbar on the left is full of icons that you can use in your mind maps - we'll come to those in a bit.

9.2.1 Nodes

Everything's about ~nodes~ in FreeMind. When you create a new mind map, it start with a central node (your theme) and then branches into child nodes, their children nodes and so on. The



A basic mind map with a few nodes

branches that join these nodes are called ~edges~. Nodes can contain as much text as you'd like, limited only by how readable you want your mind map to be. Typically, though, you're not supposed to use full sentences in your mind maps - the experts advise using just words and phrases to convey meaning.

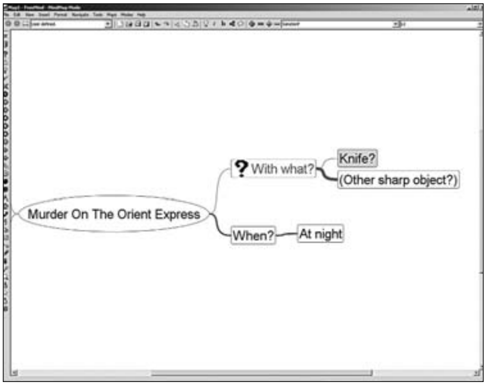
Click on the central node to change the title - "New Mindmap" is hardly what you're going to call it, is it? Use the [Insert] key to start creating new nodes. To create multiple nodes at the same level of hierarchy, hit [Enter]. You can use the arrow keys to move around the mind map, creating or deleting nodes (with the [Delete] key, naturally) as you go along. Use [F2] to change the content of any node - this is much like Excel. You should quickly get used to this style of keyboard navigation - you'll find it a lot easier to work when you don't have to worry about using the mouse every now and then. Refer to the end of this chapter for a full list of FreeMind's keyboard shortcuts.

Now that we've completed the basic act of creating and editing nodes, let's see what else we can do with them.

9.2.2 Formatting Nodes

While highly functional, your basic mind map is hardly visually appealing. Not that it needs to be pretty just for the sake of it, but good mind maps always have visual cues that, for whatever reason, highlight items within the map. It could be a big red sign

against something that you shouldn't be doing (going off at a tangent, perhaps), or big, bold lettering to indicate tasks that you should prioritise. The bottom-line is that items that need attention should look the part and grab attention.



A suitably-formatted mind map. It's probably a good thing you can only see this in black and white

Let's start with formatting fonts: just hover over a node to select it (it'll get highlighted in grey when you do) and use the font selector in the toolbar above to change the style to your whim. To change the font colour, right-click on the node and go to Format > Node Color. Notice that the Format menu lets you also select a node background colour, edge colour and edge styles. If you'd like your nodes to be bubbles rather than the somewhat free text they are by default, right-click on them and select Format > Bubble. Every child node henceforth will also be a bubble.

FreeMind also comes with its own pre-configured styles, called Physical Styles - they're nothing special, really, but they ~are~ bound to the function keys, and if you familiarise yourself with them, you can just hit [F5] for hot topics instead of wondering what style you're going to apply next, for instance. Pretty handy.

Finally, you can assign icons to nodes, which is where the toolbar on the left comes into the picture. FreeMind's collection of icons covers many conceivable scenarios that you want to use them in - Stop signs, reminders, e-mail addresses, even priority levels. Just click on the respective icon to add it to your node; you can add as many as you like. To remove icons, click on the red cross at

the top of the toolbar. The trash can below it deletes all the icons in a node.

To highlight entire trees, you can use ~clouds~, which can encompass nodes and all their children. Just right-click on the node and go to Insert > Cloud. You can then change the cloud's colour by right-clicking on any node in the cloud and selecting Format > Cloud Color.

This pretty much covers the basics; let's see what else is possible with these nodes...

9.3 More Work With Nodes

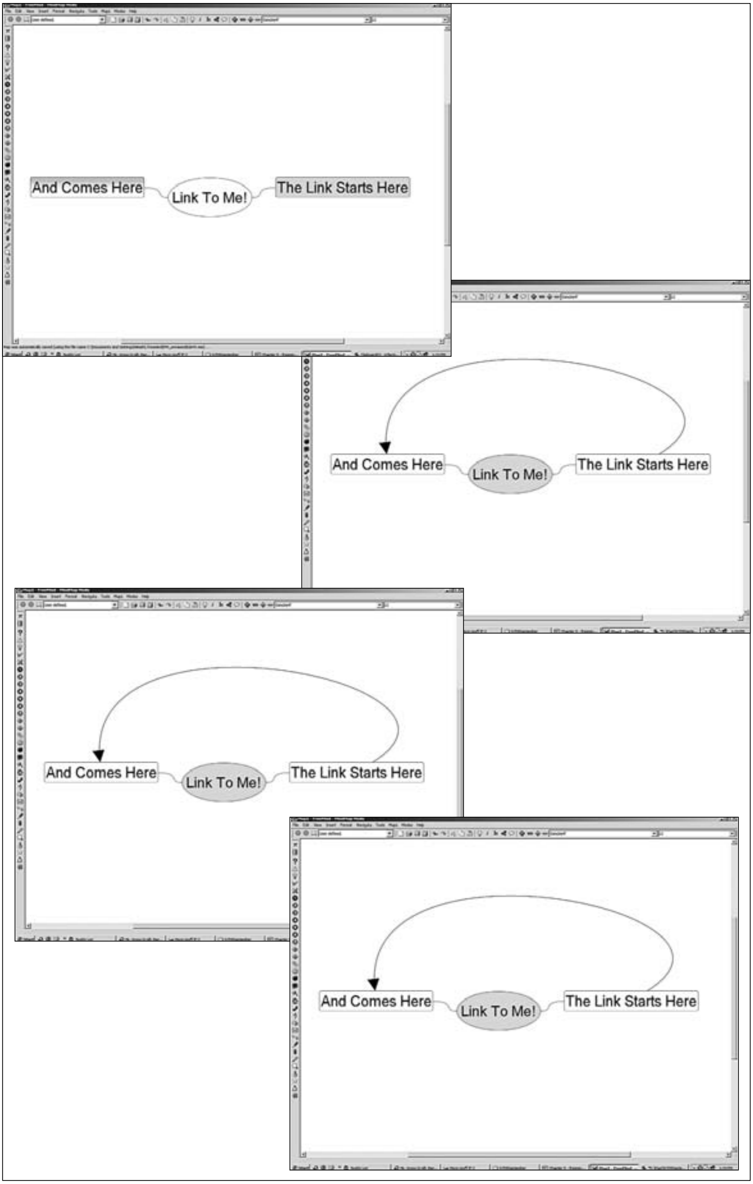
It's quite easy to grasp the basics of FreeMind with a couple of hours' use - it's a fairly easy program to learn - but there's a lot more that you don't get to see right away.

9.3.1 Linking Nodes

You don't always need to restrict yourself to the parent-child or sibling relationship for nodes. If you find that two nodes are related but belong to different trees, you can create ~graphical links~ between them. Just right-click on the first node and drag your cursor to the node you want to relate it to. You don't need to bother about the direction of the relationship - you can format the arrow later. As you do so, you'll notice a highlight appear on the second node - this lets you choose whether the link will point to the top of the node or its open side. This screenshot should be more illustrative:

To tweak the shape of the graphical links, click on it and drag it around. If you click closer to one of the ends, it'll be affected more than the other. Right-clicking on the link lets you select the direction of the arrow and change its colour as well.

You can also use ~local hyperlinks~ to link nodes, so clicking on one node will take you to the other. This doesn't seem too use-



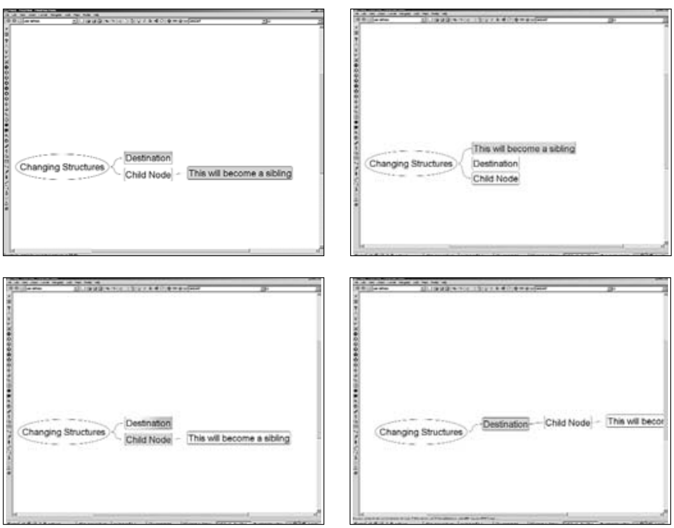
Use the highlight on the linked node to decide where to get the arrow to point

ful while you're creating the mind map, but is a real boon for anyone who's trying to navigate it. To create a local hyperlink, first select the node you want users to click on, hold down [Ctrl] and then select the node you want to link to. Right-click on the node and go to Insert > Add Local Hyperlink (or use the shortcut - [Alt] + [L]), and your work is done.

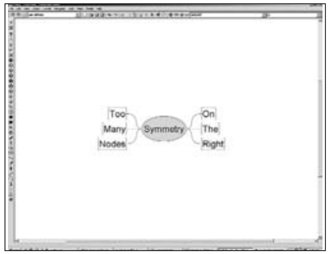
Nodes can also link to Web sites and files on your PC - just right-click on the node and go to Insert > Hyperlink (Text Field) for the former and Insert > Hyperlink (File Chooser) for the latter.

9.3.2 Restructuring Your Mind Map

Shifting nodes around your mind map is a simple matter of clicking and dragging one node to another. As with graphical links, you can use the destination node's highlights to figure out where your node's going to end up. Dragging to the top of the destination node will create a sibling node, and dragging to the right of the destination node (or left, as the case may be) will create a child node.

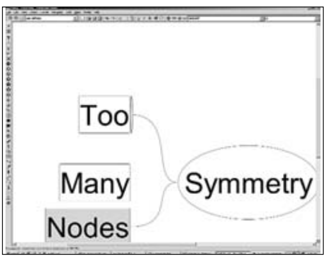


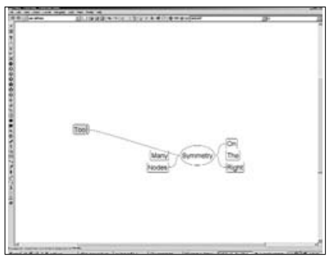
Use the highlights to create child or sibling nodes



Move some nodes to the left of the main node for some symmetry

When you create your mind maps, you'll find that FreeMind always creates new nodes to the right of the central node, and too often you'll find yourself scrolling up and down to see what you've written. To avoid this hassle, move a few nodes to the left - just drag and drop them onto the left side of the main node.





You're bound to miss this - click on the little ellipse you see there and drag your node around to your heart's delight

You're prone to miss this feature, but FreeMind lets you drag nodes around the screen without changing links too - move your mouse cursor to just before the node's text, and you'll see a little ellipse appear. Click and drag this around the screen to reposition your node; FreeMind will always maintain a minimum distance between two nodes, but if you want your mind map more spaced out, this comes in handy.

9.3.3 Navigating Your Mind Map

Set reminders for tasks right within FreeMind

Creating big, complex mind maps is all very well, but you'll soon be cursing the Creator if you don't know how to work your way through the map to get the information you need. The most basic things you need to know are panning and zooming - just click and drag in an empty area of the map to pan it. To zoom, hold down [Ctrl] and use your mouse's scroll wheel. It works in the opposite way you'd expect it to - [Ctrl] + [Scroll Up] zooms out instead of in, and vice versa. Weird, but you get used to it.

If you're viewing a huge mind map, the first thing you need to do is collapse all the trees and leave only the first level of nodes visible. This will help you navigate the map in a much less chaotic fashion. To do this, select the central node and click on the grey "-" icon on the toolbar (or use the [Alt] + [Home] shortcut). Like we mentioned before, you can use the arrow keys to navigate the nodes; to expand and collapse node trees, use [Space]. To get to the central node from anywhere, hit [Esc].

9.3.4 Setting Reminders In Nodes

If you want to be reminded of any task or item inside your mind map, you can have FreeMind set up a reminder for you. Select the node you want to be reminded about, go to Tools > Show Calendar, select a date and choose Remind Me At This Date. A clock icon will appear in the node, indicating that the reminder has been set.

9.4 FreeMind And The Outside World

All we've talked about thus far involves using FreeMind for yourself - what happens when you want to share your ideas with the world, and have them share theirs with you? More importantly, if you've created a mind map for a proposal and want to e-mail it to someone, you can't really expect them to download FreeMind just because you want them to, right? There are many ways to share your mind map with others, starting with a simple text dump to using it online in your Wiki.

9.4.1 Sharing Maps With Others

More than one person working on the same mind map can easily lead to chaos, so FreeMind provides a couple of handy tools to track changes made to the mind map. Go to Tools > Show Modification Times to show the date and time of node creation and modifications in a tool-tip when you hover the mouse cursor over a node. To view the entire history of the mind map, go to Tools > Show Map History.

To ensure no new change goes unnoticed, select Tools > Show Revisions in Yellow. Once all this is done, you'll be better equipped to share your mind map. Still, FreeMind is primarily a ~personal~ tool, so don't go about sharing your map with too many people.

9.4.2 Exporting Mind Maps

The simplest way to export a mind map is by selecting the central node, hitting [Ctrl] + [C] to copy, and pasting it in your text editor. Child nodes will be indented as you go down the trees, so the result looks much like this:

My Mind Map
A Child Node
Another child node
A grandchild node?
And another
Link Me! <#Freemind_Link_1184257709> ~(These are local

hyperlinks)~

A Sibling Node

Go to Child Node <#Freemind_Link_578292336>

This works best for smaller mind maps, with nodes that don't have too much text in them. It simply won't do for more complex structures.

You can export your mind map as an HTML file (File > Export > HTML), which you can attach to e-mails or put up on your Web site. The mind map's structure is simplified into a Windows Explorer-like tree, making it simple to read and navigate. You can also select a single branch to export if you don't want to export the entire mind map.

What your mind map will look like when you export it to HTML

You can also export your mind map as a PDF document, an OpenOffice.org document, or as images in the PNG or JPEG format.

9.4.3 FreeMind Online

A few wiki engines and content management systems (CMSes) have plugins built for them that enable them to embed FreeMind mind maps within their pages, so anyone can use your mind maps as long as they have the JRE (Java Runtime Environment) or Adobe Flash Player installed.

The simplest implementation by far seems to be for the MediaWiki engine: once you've installed the FreeMind extension,

you can embed mind maps using this simple bit of code: <mm>[[map_name.mm|flash ~or~ applet]]</mm>.

9.4.4 Keeping Your Ideas Secure

FreeMind can encrypt nodes and even entire mind maps for you, so nobody can get at them unless they have your password. To create encrypted nodes, go to Tools > Insert Encrypted Node. You'll be asked to enter a password, and then you'll see a new node with an open lock icon, ready for editing. When you're done with the content, use Tools > Toggle Crypted / Encrypted to lock and unlock the node. Once you've created and locked an encrypted node, you can't copy/paste any content from the tree that contains it, keeping your information secure.

Similarly, use File > Create Encrypted Map to encrypt your entire mind map.

9.5 Customising FreeMind

Not happy with the defaults? There's a good deal of tweaking you can do with FreeMind, and it all starts with the user.properties file. You'll find it in C:\Documents and Settings\[your username]\.freemind - open it in Notepad to start customising.

The contents file may look daunting, but you'll find that most of the entries are self-explanatory, or have comments that indicate their function. All the entries are commented out, which means that FreeMind is using its own defaults. To override the defaults, un-comment the entries you're customising by removing the "#" at the beginning of the line.

9.5.1 Keyboard shortcuts and more

Keyboard shortcuts are represented thus: keystroke_[function] = [shortcut] (without the square brackets). For example, keystroke_open = control O.

To customise the shortcut for any of these actions, just replace the text after the equal-to sign with the shortcut, keeping these rules in mind:

1. ~Accelerators~ like [Ctrl], [Shift] or [Alt] are represented with their names in lowercase - "control", "shift" and "alt" respectively
2. All other keys - letters, [Enter], [Space], the arrow keys and so on - are in uppercase. For example, "control alt ENTER", "shift DOWN" and so on.
3. Numbers remain as is, and function keys are represented as they are on the keyboard (F1, F3, etc.)

There's a lot more possible here: a lot of us prefer using bubbles for nodes to the default fork - you can enable this by changing the value of standardnodestyle from "fork" to "bubble." Just read through the file for more such nifty tweaks!

9.5.2 Changing the physical styles

We've talked about these before - physical styles are pre-configured formatting styles that you can apply to nodes using the function keys. To customise these, you need some knowledge of HTML font styles, and good old Notepad.

Open patterns.xml from your FreeMind installation directory (usually C:\Program Files\FreeMind), and you'll find a list of nodes of this nature:

```
<pattern name="Default">
<node icon="none" color="#000000">
<font/>
</node>
<edge/>
</pattern>
```

The tags are quite self-explanatory: the node tag contains customisation for nodes - colours, font names and sizes and so on. For

the edge, you can specify a colour (color="#{put HTML colour code here}") and a width in pixels.

To add your own physical styles, you'll need to copy patterns.xml to your C:\Documents and Settings\[your username]\.freemind directory and make your changes there. To assign a shortcut for this style, open user.properties once again and create this new entry in the Keystrokes section:

keystroke_apply_pattern_19 = control F10 (or whatever shortcut you please)

We've assumed that you've created your new style just after "Cyan", which is pattern 18. You'll have to make the necessary adjustments with new styles yourself.

9.6 Keyboard Shortcuts

Knowing FreeMind's keyboard shortcuts will make you much more productive, so keep these pages handy (you'll also find this list in FreeMind's documentation). Some of the [Alt] shortcuts won't work in the Windows version, because Windows binds [Alt] keystrokes to the main menu.

Menu accelerators
new map = [Ctrl] + [N]
open = [Ctrl] + [O]
save = [Ctrl] + [S]
save as = [Ctrl] + [A]
print = [Ctrl] + [P]
close = [Ctrl] + [W]
quit = [Ctrl] + [Q]
export to HTML = [Ctrl] + [E]
export branch to HTML = [Ctrl] + [H]
open first in history = [Ctrl] + [Shift] + [W]

Map and mode switching
previous map = [Ctrl] + [Left Arrow]
next map = [Ctrl] + [Right Arrow]
mode MindMap = [Alt] + [1]
mode Browse = [Alt] + [2]
mode File = [Alt] + [3]

Node editing commands
toggle italic = [Ctrl] + [I]
toggle boldface = [Ctrl] + [B]
toggle cloud = [Ctrl] + [Shift] + [B]
cut = [Ctrl] + [X]
copy = [Ctrl] + [C]
copy single = [Ctrl] + [Y]
paste = [Ctrl] + [V]
edit = [F2]
edit long node = [Alt] + [Enter]
join nodes = [Ctrl] + [J]
toggle folded = [Space]
toggle children folded = [Ctrl] + [Space]
set link by filechooser = [Ctrl] + [Shift] + [K]
set link by textfield = [Ctrl] + [K]
set image by filechooser = [Alt] + [K]
node up = [Ctrl] + [Up Arrow]
node down = [Ctrl] + [Down Arrow]
node increase font size = [Ctrl] + [L]
node decrease font size = [Ctrl] + [M]
branch increase font size = [Ctrl] + [Shift] + [L]
branch decrease font size = [Ctrl] + [Shift] + [M]
export branch = [Alt] + [A]

Node navigation commands
move to root = [Esc]
move up = [E]
move down = [D]
move left = [S]
move right = [F]

follow link = [Ctrl] + [Enter]

New node commands
add = [Enter]
add child = [Insert]
add sibling before =[Shift] + [Enter]

Search
find = [Ctrl] + [F]
find next = [Ctrl] + [G]

Patterns
apply pattern 1 = [F1]
apply pattern 2 = [Ctrl] + [Shift] + [N]
apply pattern 3 = [F3]
apply pattern 4 = [F4]
apply pattern 5 = [F5]
apply pattern 6 = [F6]
apply pattern 7 = [F7]
apply pattern 8 = [F8]
apply pattern 9 = [F9]
apply pattern 10 = [Ctrl] + [F1]
apply pattern 11 = [Ctrl] + [F2]
apply pattern 12 = [Ctrl] + [F3]
apply pattern 13 = [Ctrl] + [F4]
apply pattern 14 = [Ctrl] + [F5]
apply pattern 15 = [Ctrl] + [F6]
apply pattern 16 = [Ctrl] + [F7]
apply pattern 17 = [Ctrl] + [F8]
apply pattern 18 = [Ctrl] + [F9]
zoom out = [Alt] + [Up Arrow]
zoom in = [Alt] + [Down Arrow]
node color = [Alt] + [C]
node color blend = [Alt] + [B]
edge color = [Alt] + [E]

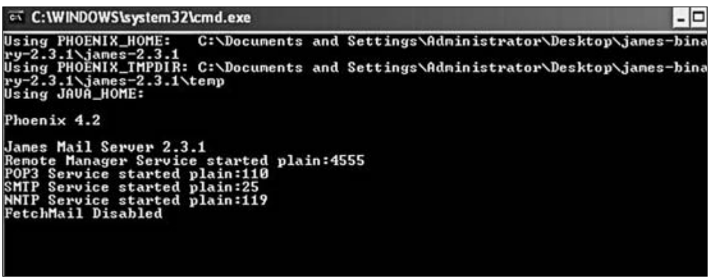
The Mail Server

Email is recognised as a very important tool for doing business. To handle e-mail traffic, which might range from hundreds to millions of messages depending on the size of the organisation, a dedicated server is necessary. These are known as mail servers. In conjunction with programs like Outlook or Thunderbird, mail servers provide a complete messaging solution for a business.

For our free office, we chose Apache James because it is a free and portable Java Enterprise mail server that runs on Windows, Unix / Linux, and Mac OS X. It uses standard open source protocols like SMTP, POP3, and NNTP. James is a part of the Apache Software Foundation, one of whose projects is Apache Tomcat, an open source and free Java Web server that powers a fairly large proportion of the sites on the Internet.

11.1 Installing James

Download the latest stable binaries from the download section at **http://james.apache.org** . Select either the .tar or .zip binaries, depending on your system (Linux or Windows). Since James is built on Java, you need to have the JDK installed; the latest version can be obtained from **http://java.sun.com/javase/downloads/index.jsp.** Extract the binaries into a folder in your hard drive. Navigate to `bin\run.bat` (Windows) or `bin/run.sh` (Linux) and run the file.



Installing James on your system

You will see something that looks like this:
Hit `[Ctrl] + [C]` and terminate the process. This completes the installation of James.

James implements mailets and matchers - Java APIs that determine how to deal with incoming and outgoing mail. Since these are provided with the distribution, users can modify these APIs to suit their own needs - there are a wide range of configuration and

security options available for you to tweak around with. Custom mailets and matchers can also be built from scratch. Here we provide you a description of some basic features and settings.

11.2 Configuring James

To configure James as your mail server, you need to know the DNS server to use. In Windows, run `ipconfig/all` and note down the DNS and IP address. For Linux, use `ifconfig` for IP address and `/ etc / resolv. conf` for DNS. Go to `apps/james/SAR-INF/config.xml` and check out the section called `<servernames>`. Put the name of the domain you want to use within the `<servername>` elements. We have used "company.com" as a dummy domain.

Here's how we have configured our own domain:

```
<servernames autodetect="true"
    autodetectIP="true">
    <servername> company.com </servername>
</servernames>
```

Check the DNS configuration of your domain using a Web site like **www.dnsreport.com**. In the same `config.xml` file, go to `<dnsserver>` and add the DNS server:

```
<dnsserver>
   <servers> 123.456.789.01 </servers>
   <autodiscover> true </autodiscover>
   <authoritative> false </authoritative>
   <maxcachesize> 50000 </maxcachesize>
</dnsserver>
```

(Replace 123.456. ... with your DNS.)

Save the modifications you made to the `config.xml` file and close it.

Also check the MX record section for your domain using **www.dnsreport.com** and confirm that the MX records point to your IP address. This is necessary if mail has to be routed to your domain.

11.3 Sending Mail

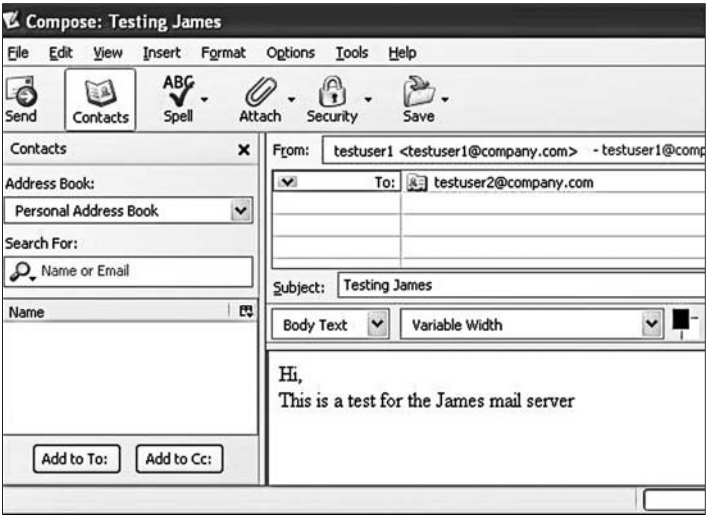
To use James as a mail server, you have to check whether it is accepting mails or not. Run `run.bat` or `run.sh` again. Type `telnet localhost 4555` at the command prompt. You will be prompted to enter a user ID and password. Enter root at both the prompts. Create user accounts using the command `adduser`

Start by creating user accounts

`[username] [password]`. We created two users with the usernames `testuser1` and `testuser2`. Type quit to close the connection.

Start your e-mail client. Keeping in mind the requirements for a free office, we are using Thunderbird, a free mail client from the Mozilla foundation, which is also behind the popular Firefox browser.

Open Thunderbird, go to `Tools > Account Settings` and create accounts for the two dummy users you created earlier. This



Your first mail sent using James...

...and the message is received!

should be fairly straightforward. Now use localhost as the server name. Compose a mail from one user, say **testuser1@company.com**, to **testuser2@company.com** and send it. When you check the inbox of testuser2, you should see the mail you sent. James is now ready for use!

11.4 Storage

James can be used in conjunction with RDBMS tools to store mails and other data. It connects to databases through customised JDBC (Java Database Connectivity) drivers. James is particularly well-integrated with MySQL, a free and open source server. The driver for MySQL is packaged with the installation binaries. For other databases, download the appropriate driver into the `lib` folder of the James installation.

Browse to the `<database-connections>` block in `config.xml` and configure the children in the `<data-source>` element. There are a number of data-source elements each with a unique attribute name . The children in each data-source element are driver (class name of database driver), dburl (JDBC connection URL to the database driver), user, password, and max (maximum number of concurrent JDBC connections). A sample configuration for MySQL is shown below.

```
<data-source name="maildb"
   class="org.apache.james.util.mordred.
   JdbcDataSource">
   <driver> org.gjt.mm.mysql.Driver </driver>
   <dburl> jdbc:mysql://1211.0.0.1/mail </dburl>
   <user> username </user>
   <password> password </password>
   <max> 20 </max>
</data-source>
```

Further modifications are needed in the `config.xml` file for different data types like mails and message spools to be stored in separate locations. For example, to store mails in the maildb data-source, the following changes to the `<inboxRepository>` tag are needed:

```
<inboxRepository>
   <repository destinationURL="db://maildb/inbox/"
```

```
  type="MAIL"/>
</inboxRepository>
```

SQL statements are used by James to access different types of vendor databases and perform various actions. These are detailed in the `sqlResources.xml` file in the `apps/james/conf` directory.

11.5 Security

Security is one of the most important facets of e-mail. James uses SSL or TLS for securing e-mails. This is possible through the use of the Java Secure Sockets Extension (JSSE) infrastructure, which is pre-packaged with Java 1.4.x.

To enable TLS in James for the SMTP server, modify the `<smtpserver>` element in the `config.xml` file so that it reads `<smtpserver - tls>`. Also set `<useTLS>` to True. The same procedure is to be followed for securing POP3, NNTP and RemoteManager. Here's how to enable TLS for SMTP. Remember that the port number and connection timeout can be changed, and you can set it according to how long (in milliseconds) you want to wait for a connection.

```
<smtpserver-tls enabled="true">
  <port>25</port>
  <useTLS>true</useTLS>
  <handler>
    <helloName autodetect="true"> myMailServer
    </helloName>
    <connectiontimeout> 360000 </connectiontimeout>
    <authorizedAddresses> 1211.0.0.0/8
    </authorizedAddresses>
    <maxmessagesize> 0 </maxmessagesize>
  </handler>
</smtpserver-tls>
```

James can be configured for use as an authenticated SMTP server, where users need to authenticate themselves before sending mail. This prevents unauthorised e-mail and cuts down on the incidences of spam.

James also uses Bayesian filtering techniques to detect spam. Bayesian filters use message size as one of the metrics for determining whether a message is spam or not. The BayesianAnalysisFeeder mailet is used to send either ham (good mail) or spam messages to the BayesianAnalysis mailet. The frequency of spam, called the corpus, is stored in a JDBC database. This database is checked by a Java thread every 10 minutes for changes made to the corpus, which will then be updated if necessary. A `config.xml` definition example for deploying the feeder mailet which can be set to determine whether senders are spamming or hamming is shown below. These will be then stored in the database and James will block a blacklisted user the next time any mail from it is received. The maxSize attribute is "the maximum message size (in bytes) that a message may have to be considered spam," meaning that if a mail is larger than that, it will not be considered a candidate for being spam.

```
    <!-- "not spam" bayesian analysis feeder. -->

<mailet match="RecipientIs=not.spam@thisdomain.com"
  class="BayesianAnalysisFeeder">
  <repositoryPath> db://maildb </repositoryPath>
  <feedType> ham </feedType>
  <maxSize> 200000 </maxSize>
</mailet>

<!-- "spam" bayesian analysis feeder. -->

<mailet match="RecipientIs=spam@thisdomain.com"
   class="BayesianAnalysisFeeder">
   <repositoryPath> db://maildb </repositoryPath>
   <feedType> spam </feedType>
```

```
   <maxSize> 200000 </maxSize>
</mailet>
```

11.6 Support

James is a live project and has strong vendor support, with regular bug fixes and version support, as with all other projects of the Apache Software Foundation. Apache Tomcat, for example, is a widely-used open source Web server, like we mentioned.

James has wide and active community participation. The primary place for information related to James is the project page itself (**http://james.apache.org**). Detailed instructions on how to configure various services inside James are available here. The James wiki (**http://wiki.apache.org/james**) is an extensive resource dealing with everything from installation to advanced troubleshooting. The FAQ section, along with the community forums, are also useful.

11.7 In Sum

Since James is an ongoing project, many features are in the experimental stage. For example, TLS support for POP3 is not stable. The command line interface has a few bugs. The upgrade procedure is not automatic, and settings and files have to be manually copied into their respective folders.

That said, James is a very good alternative for businesses looking to manage their mail and who don't want to use commercial products like Microsoft Exchange, Netmail, or IBM Lotus Domino. Since it is meant to be an enterprise mail server, large businesses with thousands of user accounts can use James without worrying about scalability issues.

The Proxy Server

Along with the ready conveniences that networking brings to offices, such as being able to share files, there is also the need to properly share resources (such as printers, which cannot be given to every computer). A proxy server takes care of sharing an Internet connection on a network and ensuring everyone gets what they need.

12.1 Proxies, Servers, And Proxy Servers

There is actually a lot of terminology involved that's commonly (and loosely) used to mean a lot of slightly different things. A proxy is a service that takes a request from a client connected to it and forwards it to a designated server. It then obtains the required information and passes it back to the client. The proxy server thus acts as an intermediary between the client and the host; it makes the request *on behalf of the client*, as a "proxy."

A proxy server that passes on all requests to the host and sends back the replies unmodified is called a *tunnelling proxy*.

A *Web proxy* would be one that primarily deals with WWW traffic, and in some cases might reformat Web pages to suit a specific requirement. For instance, a cell phone with limited browsing capabilities would not be able to display complex graphical elements or the results of complex scripts, and a request from it would be reformatted by a Web proxy to fit its screen.

Anonymous proxies are used to bypass local access restrictions to, for example, gaming sites that may have been banned on a school network. These constitute a special type of Web proxy. They work by masking the IP of the client so that its identity is not known, and the client-side software does not recognise it as the IP making the request.

Proxy server software is primarily used to manage user access to the Internet, maintain a cache for improving access times, and to enforce an overall set of rules by which access should be governed on the network.

There are lots of software vendors who offer comprehensive suites of proxy server software to monitor and control Internet traffic over a network, such as Proxy+, Proxy-Pro, and CCProxy, among others. These have quite a lot of features built into them and some of them even offer online support. But most important-

ly, they are commercial software (that is, they are paid). Still, one of the best ones we found was FreeProxy which is, well, free.

12.1.1 All About FreeProxy

Available from **www.handcraftedsoftware.org**, FreeProxy is developed by Hand-Crafted Software, and according to them, FreeProxy is "free of any spyware, malware, advertisements etc. and is a 100% pure fully functional proxy server." Well, after all, when you get something like this for free, the value for money becomes infinite.

Skip the rest of this subsection if you want to directly get to using FreeProxy... After many betas and testing, FreeProxy was released as version 3.5 in December 2003, with an update within a week of its release. Over the next one month, it underwent a series of assaulting upgrades to improve tunnelling performance, error reporting, and other general tweaks.

A new release (build 1450) was released in May 2004 after a couple of months in beta testing. Being freeware, implied warranties are non-existent and upgrades to the software are basically the only way to keep it working right.

Release v3.81 was done in October 2004, which greatly improved performance, and this was touted as the "first stable release." However, the v3.8x series had a set of security issues related to user access, so much so that one Web site that had reviewed it and had it for download claimed it was "probably good for a quick game of Quake or two, but not secure enough to invite the whole neighborhood over."

This is probably what decided that a more secure version needed to come out and led to version 3.92 with ban lists and support for Windows Groups.

Since this April, a new (and of course, the latest thus far) version has been out, and it has been renamed "FreeProxy Internet Suite 4.00" since it incorporates full-fledged SMTP and POP server

functionality, making it a complete package rather than a mere proxy. However, this is still in alpha (not even beta yet!) so we decided to go with v3.92.

12.2 Getting started

12.2.1 Basic Requirements

We're assuming your network has been configured and set up. And we also assume one terminal designated as the server has a connection (dial-up or broadband) to the Internet. When we get down to operating systems, FreeProxy requires one of the following for the server:

- Windows NT4 (Service Pack 4 or later)
- Windows 2000 (Server / Pro)
- Windows Server 2003
- Windows XP (Pro / Home)

The client can have any OS, and it has been tested with a range of browsers such as IE, Netscape, and Safari. It also supports various non-HTTP clients such as MSN, AOL, and ICQ.

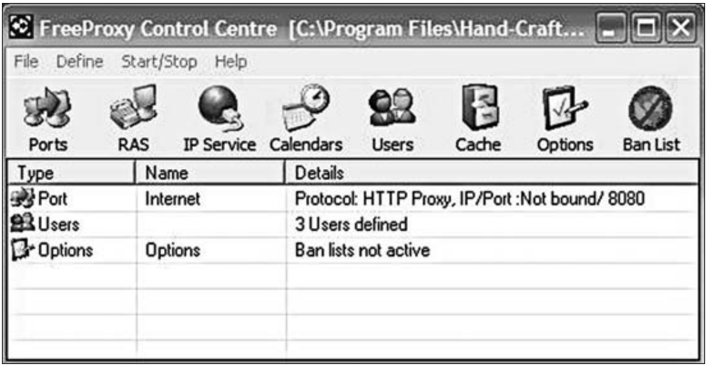
We'd like to mention that even though FreeProxy does not limit the number of users, OSes like Windows 98 / Me (for those of us still using them!) seem to run into a mess if you connect more than two or three clients.

12.2.2 Installation And Setup

The first step involves the installation of FreeProxy on the computer you plan to use as the server. Incidentally, this would also be the system that would have the Internet connection.

The setup is fairly simple: you would read and agree to the license (which, for a change, is in plain English so you can actually understand what they're trying to tell you) and choose the installation folder. When you start up FreeProxy, it presents you

with the FreeProxy Control Center, which displays various parameters you set up, such as connections, users, and options.



The FreeProxy Control Center presents a clutter-free overview of significant processes

Here, a basic security feature we feel necessary to mention is the Control Center access password. It is available from the Define menu and once set, it prompts for a password every time FreeProxy is loaded, and if it is forgotten, the only to reset is to remove and re-install the whole thing.

The main menu of the console window displays the following configurable items by default: Ports, Users, and Options. These give the administrator an overall view of the number of ports configured, users configured, and options set. Here, we are not sure why, but the only “options” it seems to show are whether ban-lists are in use; it doesn’t seem to indicate the status of any other options. We’ll get down to ban-lists and other options in the next section.

Firstly, you need to configure a port to select the connections you plan to make by either double-clicking on the ports item in the console window or selecting Define Ports from the Define menu. Here, you give a name for the port and specify what kind of protocol and client port you wish to use it for. For instance, the HTTP protocol generally uses port 80 by default. Next, you

need to specify if you need to use a proxy server. If you connect to your ISP proxy server, you would check this box and fill in the proxy server name.

Here, we'd like to mention a powerful security feature built into FreeProxy called Local Binding. Selecting this ensures that only the specified adapter at the specified IP address can access the proxy. It goes like this: every physical network interface would have its own IP, and a dial-up connection would also be allocated an IP address. So by binding FreeProxy to only one network adaptor, you effectively prevent outsiders from accessing your internal network. However, this would probably not be of much use in the case of a non-fixed IP addresses.

Next, from Internet Options in the Windows Control Panel, you would need to check the Use Proxy Server for your LAN from the LAN Settings (from the Connections tab) and fill in the IP address of the server. You would also need to check the Bypass Proxy Server for Local Addresses box.

After specifying the port setup, you need to Click on RAS Settings and define the conditions for a Dial-Up Connection (DUN). Here, you would select the modem to use and fill in details such as username, password, and other options like connection timeout, auto-dial, etc.

12.2.3 Taking Control

Before you can allow people access to the network, you would first need to know who can be in and who shouldn't. These settings are defined in the User tab in the Define menu. By default, two groups of users are defined: All Users and Windows Authenticated Users.

Apart from this, you also have the option of adding individual users to the FreeProxy database. Groups have the added advantage of being to allocate permissions or resources for a large number of users who are part of that domain. For that to happen, though, the user needs to be authenticated. Put in plain English, what this

means is figuring out whether the user who just signed in is really who he says he is and that he is registered as a legitimate user.

FreeProxy allows an easy way of entering users—double-click the user tab

One of the easiest ways this can be done is through Windows Domain Authentication. For this to happen, though, it is essential that the server running FreeProxy be also logged onto a domain the user can authenticate against. Once a user authenticates against the Windows domain, he becomes part of the Windows Authenticated User group (present as default) and is granted all the resources available to that group.

From here it starts to get a tad bit complicated on authenticating individual users against the FreeProxy database, so we shall leave it as beyond the scope of this ~Fast Track~, but we'll say one thing; FreeProxy has the abilities to filter through users using a wide variety of parameters.

Once you're through configuring the protocols and users, it's time to start. The Start/Stop menu brings up the, umm, "start" menu, from where you can begin. FreeProxy can be started either as a service or in console mode. As a service, it runs in the background without any open windows, and has the added advantage of not being interrupted when users log on or off. The console mode provides a more visual way of viewing various statuses and using different features.

12.3 Other Features

12.3.1 Reports

FreeProxy has, inbuilt, a comprehensive set of logging and reporting tools to monitor the URLs accessed so that the administrator has better control over how resources are used. Reports can be accessed from the options button in the Control Center. Several types of reports are available, and the ones you set up depend solely on your needs and your ability to manage that much data. For instance, you might want to set an Access Log to keep track of how many times URLs on the Forbidden list were accessed. Of course, if you're really nosy on what everyone is up to, you *can* set the Log Message Content to keep a log of information from every single page visited. We guess this might be of use only to extremely secure and security-crazy networks, since performance is bound to get severely affected, especially on large networks.

For a compromise between total message content logs and access logs, you can also set the Summary Stats, which gives the volume totals of IPs and protocol (HTTP, FTP, etc.) or Set Connection Statistics, which gives you details on sites visited etc. per connection session.

12.3.2 The Web Cache

Caches are an integral part of proxy servers since they significantly reduce the load on the Internet server. As the name suggests, a web cache works by keeping a local copy of documents or Web pages accessed frequently in order to improve overall response and reduce traffic.

We make special mention of the web cache here since the cache in FreeProxy is a built-from-scratch application based on the RFC2616 specifications and has pretty decent performance and features.

When you click on the Cache button in the FreeProxy Control Center, you need to first decide on whether you want to enable

caching or not by checking the Activate the Cache box.

Set continuous cache management to keep cache sizes down

When activated, the system asks you to specify paths for two files, a Cache Control Path and a Cache Data Path. Control files are created every time a new URL is requested, and consist primarily of data to identify the particular URL when encountered the next time. Data files are created to hold the contents of the URL, and are sent to the client whenever the cached version is to be used.

So in terms of better performance, if you're planning on using two physical disks for caching, it makes sense to have the control and data files on different paths. But then this would also depend on other factors like the speed of your Internet connection and the load on the network. However, in all probability, a file fetched from cache is likely to be delivered faster than one retrieved from a remote server.

12.3.3 Cache Management

FreeProxy incorporates a method for managing the cache and to keep a tab on how big it is allowed to get, and long the files can stay there. Selecting the No Management radio button requires you to manually delete irrelevant data from the cache, otherwise no more caching is done when it gets full.

Selecting Continuous lets FreeProxy manage the cache by running the process every hour. This may not be a huge performance bungler for small networks, but for large networks, we feel

the best option is to set it to run at a specific time when server load would be low.

The cache also lets you set limitations such as the maximum number of files to cache, lifetime of the cached files, and maximum size of the cache. Again, we feel it is necessary to only set a max cache size rather than specifying file number or age limitations.

12.3.4 Ban Lists

Perhaps one of the most significant upgrades to FreeProxy from v3.8x to v3.9x is the introduction of highly customisable ban lists. Simply put, a ban list is a list of all URLs or IP addresses that have been considered inappropriate and forbidden—online gambling sites, for instance. Of course, when it comes to an office network, it becomes all the more necessary to keep a tab on all such URLs, which would hog bandwidth without resulting in productive work (read: online games and social networking sites!).

FreeProxy allows the administrator to set up various categories of ban lists, each containing its own set of URLs to be banned and the response to be given for each category. These settings are saved to a file (.blf) and can be exported to other servers as well.

Click on the Ban-list icon to activate the feature. This takes you to the Manage Ban Lists window. Click New to create a new list. Once an active file is available, you can enter in various categories, their details, and how you want to ban them. FreeProxy allows you to ban each category differently—by either redirecting the browser to a different page or displaying the error page or simply giving a blunt response saying the page is banned.

Different categories of sites can be banned in different ways

This can be useful; for instance, as an administrator, you can redirect all URLs in the "Game / Social sites" category to the company policy page (which states that such activities are not expected during working hours) for a subtle effect. Or you can ban sites under "Gambling / Porn sites" directly with a response that gives a stern warning that each access attempt is logged.

After a category is added, clicking on Manage Category Details allows you to add, modify, or delete the URLs for that category.

12.4 Summing It Up

All in all, what we've described above is a very good piece of software, and for something that is free, it can't get much better than this. Of course, it does have its own share of bugs (this is free software, after all), and with some of them getting fixed with every subsequent release, it might require you to upgrade every time a new version is out. But then, bugs exist everywhere, and this seems a small price to pay for software such as this.

12.5 Squid

Squid is a multi-functional HTTP proxy and a Web cache released under the GNU GPL that is used to optimise Web traffic and improve network performance. Squid acts as a sort of agent, accepting requests from clients and forwarding them to the Web servers. While any proxy server can do just that, the magic of Squid lies is in the way it stores a copy of the requested data onto disk so that the next time the same information is requested, it fetches it directly from disk instead of requesting the Web server for it, ultimately resulting in improved Web traffic and better bandwidth utilisation.

12.5.1 A Bit Of History

Squid traces its origins back to the early '90s, and was originally based on the Harvest Cache Daemon, in development during that time. The Squid project was then funded by a grant from the National Science Foundation, and developed by a team led by

Duane Wessels of the National Laboratory for Applied Network Research. Being freeware, it wasn't commercially interesting enough to keep the money coming in, and a few years later it ran out of funds. Nevertheless, the project continued through donations and occasional commercial investments (a list of sponsors is included in the download package!)

Squid was originally designed to run on Linux / UNIX systems, and the first beta release (v1.2) came out in October 1997. Being a constantly-evolving project, bugs were fixed and new features added every now and then by a group of people devoted to spending their time and effort developing and enhancing it, until the first "stable" version (v2.3) came out in January 2000.

Five years and two releases later, the first Windows version (v2.5) came out in May 2005. The current release, v2.6, is by far the latest and most stable available.

12.5.2 Why Squid It?

Or a more typical question; why do I need to cache anything at all? Why can't my browser just get me my page fresh off the Web instead of dumping it to disk and running several risks—from getting a private page cached to obtaining stale versions of pages when requested?

Well, this wouldn't happen for two reasons. First, Squid is based on a strict protocol that defines exactly what can be cached and what shouldn't, how long would a page remain fresh, and when to obtain the page from the Web server (and update the cache with this new information). So when it caches information from frequently-visited Web sites and builds up a repository of stored data, it knows exactly what to cache and how long to keep it.

Secondly, Squid has an advanced content routing configuration that allows you to build content clusters to route requests and balance loads. In plain English, that means Squid would service

requests by just copying the content being used instead of copying the whole thing all over again. So even if the requested information is available in the cache, Squid verifies whether that data is still fresh before sending it over to the client. If its not, then the part that isn't fresh is requested from the Web server, merged with the existing data, and sent to the client.

So adding up the numbers, in a large network it makes a lot of sense to store and reuse cached data instead of giving fresh requests to the same (unchanged) page that has already been retrieved hundreds of times over the past few days. And oh, Squid is free, so anyone can download and use it.

12.6 Getting Started

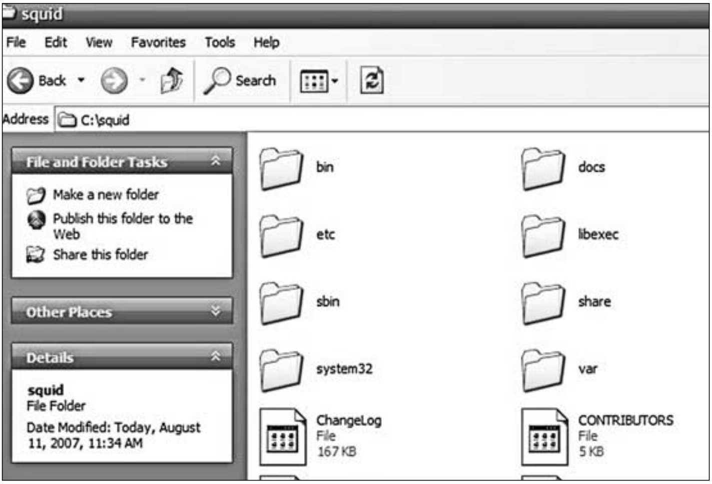
12.6.1 The Basics

Like we mentioned, Squid was originally designed to be Linux / UNIX native, and so was not intended to be run on Windows-based servers up until release v2.5. But that's all in the past; Squid v2.6 currently supports the following servers:

Windows NT4 (Service Pack 4 or later)
Windows2000 (Server or Professional)
Windows Server 2003
Windows XP Professional

The Windows version can be downloaded free from the Squid homepage (see links at the end of this chapter), and you'll find the Linux version on this month's DVD.

Okay, so you're all excited about setting up Squid and got it downloaded. Before you open the ZIP file and start to wonder where the familiar icons and programs are, remember that since this was never *really* designed with Windows in mind, it doesn't feature the Windows-style console interface we're all used to.



The default folder does seem a bit confusing at first

Squid runs in one of two ways: either as a command line application or as a Windows service that can be started from `Control Panel > Services`.

12.6.2 Files And Directories

The installation file is usually zipped and needs to be extracted to a local folder. Now Squid does not recognize the `C:\Program Files` folder, so it's a good idea to unzip to the default location on your disk, say `C:\Squid`. If you want to use some other location, you'll need to change some configuration settings to get it to work. After you extract the installation files, you get the following files and folders:

System32: This contains the ASAPI DLL that would be needed in case you are using Windows NT. You probably don't need to do anything with this if you use Windows 2000 or higher, so we'll just leave that for now.

Var: An empty folder containing another empty folder called "log", and is used to store log files to view error messages.

Depending on your download source, this folder may or may not exist and may need to be manually created before Squid can be run.

sbin: This contains the main executable, Squid.exe, although it is never executed directly from this folder. We'll get to this in a while.

etc: Despite its name, the "etc" folder contains the main configuration files that tell Squid with what parameters it needs to run with. Almost all our configuration would be done from one of these three files, the squid.conf file, which is the most important thing that needs to be modified before Squid can run.

docs: You guessed it. Here's where you find the help files and general documentation for getting Squid up and running.

Apart from these, you might get other folders depending on where you downloaded your version of Squid from. Again, since this was never designed for Windows, there is no fancy setup, and in some cases (depending on your source of download) you might need to create some of these folders in the default folder to get Squid to work properly.

12.6.3 Configuring Squid

As mentioned above, the "etc" folder contains three important configuration files that need to be modified to get Squid working:

```
squid.conf.default
mime.conf.default
cachemgr.conf.default
```

The .default is just to tell you that they are the default configuration, so it's a good idea to create a backup before you start changing them. Firstly, rename the files by removing the .default (otherwise Squid won't recognise them) and open squid.conf using Notepad.

Now, scroll down to the "dns_nameservers" tag and insert your IP in the next uncommented line ("#" (a hash) in the first column means the line will be considered a comment).

```
#   TAG: dns_nameservers
#    Use this if you want to specify a list of DNS
     name servers
#    (IP addresses) to use instead of those given in
     your
#    /etc/resolv.conf file.
#    On Windows platforms, if no value is specified
     here or in
#    the /etc/resolv.conf file, the list of DNS name
     servers are
#    taken from the Windows registry, both static
     and dynamic DHCP
#    configurations are supported.
#
#    Example: dns_nameservers 10.0.0.1 192.172.0.4
#
#Default:
# none
dns_namservers 158.156.1.127
```

Next, scroll down to the "INSERT YOUR OWN RULE" tag and insert your internal address here. This allows your client systems alone to connect to the Internet using your server. You can find your internal address by running ipconfig.

```
   # INSERT YOUR OWN RULE(S) HERE TO ALLOW ACCESS
FROM YOUR CLIENTS

   # Example rule allowing access from your local
networks. Adapt
   # to list your (internal) IP networks from where
browsing should
   # be allowed
```

```
#acl our_networks src 192.168.1.0/24
192.168.2.0/24
#HTTP_access allow our_networks
acl my_network src 192.168.0.0/16
HTTP_access allow my_network
```

Finally, before you can start using Squid, you need to create the folders that would hold the cache files. Run Squid with the "-d -z" options. (A complete list of options available can be viewed by running Squid with the "-?" option.)

Squid presents quite a lot of options to set up

There, that should take care of the basics. There are still a lot of options and advanced features available, but they aren't essential and would be beyond the scope of this ~Fast Track~.

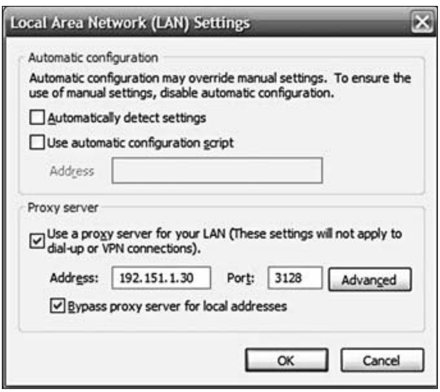
12.6.4 Get Ready, Go!

If you're running Windows 2000 or Windows XP, you can configure Squid to start as a service. For that, you first need to install Squid as a service on your server by running squid with the "-I" option. This basically adds some keys to your Registry and includes

Squid as one of the services available in Control Panel. Once installed, use net start squidnt to start the service and it will start automatically the next time you reboot.

Now that you've got Squid installed and configured Squid, you need the other computers on your network to be able to access the Internet through your proxy server. For that, you'll need to note the IP of your server and configure your client systems to this IP.

On your client machine, open Internet Options from the Control Panel and click on the Connections tab. If the machines have their own dialup connection, select the Never dial a connection option, as they will be accessing the internet through the server. Now click LAN Settings and check Use a proxy server, and fill in the IP of your server. By default, Squid would listen to port 3128 unless you changed it in the squid.conf file, so that needn't be changed.



Configure your client with the server IP and port

Finally, check Bypass proxy server for local address, save the settings, and you're all set. Now if all's well, the next time you visit a Web site on your client system, it would pass through the proxy server, get cached by Squid, and in all probability make surfing a whole lot faster for everybody.

12.7 Going Further

As we said earlier, Squid is a constantly evolving project and continually sees upgrades and enhancements. For more information on current developments or to find out ways in which you can contribute to the project, check out the Squid homepage, www.squid-cache.org.

Squid is derived from and based on ARPA's Harvest Cache project. To find out more on the original project, we suggest you visit their homepage, **http://harvest.cs.colorado.edu**.

The latest Windows version of Squid, along with documentation, can be found at the Acme Consulting site, **www.acmeconsulting.it/SquidNT.htm**

12.8 In Conclusion

While some companies integrate Squid with their firewall devices, many others implement it in large-scale proxy server installations to speed up Web access. In fact, so widespread is its usage that many people would be using Squid without ever realising that they are.

Of course, Squid does have its limitations; even with repeated upgrades, there are still bugs which are "known to exist" and support for Windows is still limited. The documentation that ships with every new release says that they hope to "fix them soon," but it's unclear how soon this would be, or how many issues would be cleared up. But judging by the sheer number of offices, networks, and Internet providers using it, it should be safe to conclude that Squid is here to stay.